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In Memoriam

MARVIN PIERCE RUCKER
1881-1953
Editor of the Virginia Medical Monthly
1942-1953

Distinguished as teacher and practitioner of obstetrics and gynecology, as president of The Medical Society of Virginia, and as president of the Richmond Board of Health, he pursued with ardor the study and writing of medical history, to which he made many worthwhile contributions. His modesty, friendliness and integrity endeared him to many.

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GUEST EDITORIAL

The Changing Picture in Pulmonary Tuberculosis

FOR the first time total eradication of tuberculosis as a serious public health problem looms as a truly feasible goal in this country, due to (1) the tremendous reduction in mortality that has taken place since the turn of the century—the present rate being less than 20% that of 1900, (2) successful application to tuberculosis of daringly ingenious surgical techniques for removal of the whole or portions of one lung, (3) discovery of specific anti-tuberculosis drugs of proven worth, when used alone (in conjunction with systemic rest), or to expand the range of usefulness of all types of chest surgery, (4) the technical triumph of micro-film which has made practical industry- and community-wide chest x-ray screening, (5) modern facilities of communication and education by which all segments of the population can be reached (Radio, TV, etc.), (6) ever increasing improvements in standards of living.

Add to these in Virginia, the prospect of gradual attainment of enough sanatorium and surgical beds to care for all of those in need, and the prompt establishment of Regional Chest Clinics throughout the State to implement participation of the General Practitioner and Internist in our program, and it will be appreciated that the means are now, or soon will be, at hand to deliver a final coup-de-grace to one of the greatest scourges ever to afflict mankind.

The *problem* is how best to integrate, and at the same time deploy effectively, all these powerful instruments for good so that both newly acquired weapons and augmented personnel will contribute to the fullest possible extent toward maximum acceleration of program.

Naturally sudden additions to basic tactical weapons require the prompt setting up of methods to evaluate the intrinsic worth of each, together with a study of the respective roles each may be expected to play in relation to the total program.

Only time will tell the exact place of surgery; it will be an important one. Long term results of new excisional procedures, particularly, have yet to be evaluated. In the meantime surgeons will continue to advise to the best of their ability in the light of present knowledge.

Many studies are currently under way to determine how the specific medicinal aids can be used to the best advantage for lasting results, both with and without surgery. Meanwhile tuberculosis specialists and physicians generally, will prescribe drugs in ways not known to be detrimental to fundamental objectives of "control" and of *cure*, respectively.

Fortunately, the current general resurgence of interest in tuberculosis, unquestionably stimulated as it has been by potentialities of modern therapy and the newly achieved feasibility of completely wiping out the disease as a serious public health problem within the foreseeable future, carries in its wake a real incentive to re-examine long established practices—to make sure that these will accelerate—rather than retard—the forward movement. Some well known therapeutic practices upon reappraisal, may possibly be destined for elimination, others assigned to new roles, while those that stand up favorably under the light of unprejudiced if merciless scrutiny, may receive new impetus and take their place, along with surgery and drugs, among our most potent weapons. In the latter category *might* be included the prescription of systemic rest upon a *truly* quantitative basis, as "definitive" treatment. On the other hand

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there are some who are beginning to toy with the possibility that bed-rest (and even general systemic (body) rest—which includes bed-rest) may eventually be relegated to the limbo of forgotten things. Several research projects are now being conducted with this thought in mind. This is a field of research in which the General Practioner ultimately will be in a position to make a major contribution.

Even basic concepts of tuberculosis are being examined anew. Perhaps it is just as well that fundamental premises be challenged once in a while. In addition to resultant wholesome periodic focusing of attention, an opportunity is afforded thoughtfully to reaffirm, where possible, rather than uncritically to take for granted through the years, their *seeming* validity and continuing usefulness.

In order to permit physicians to evaluate effectively their use of therapeutic regimes which have not yet had time to crystalize into established patterns, it is necessary that a welter of confusion as regards key terms and elementary concepts of tuberculosis be dissipated as soon as possible. Much has accumulated in day to day usage and in literature which is both inadequate and contradictory. To compare notes intelligently, doctors must learn to "talk the same language"!

To be completely effective physicians must be prepared, in cooperation with Public Health Workers, to pass on to the public and in terms it can understand, whatever knowledge of tuberculosis may finally be agreed upon as constituting a part of rudimentary public health education.

The first of a series of brief discussions of basic facts about tuberculosis and its principles of treatment appears in this issue. These are being prepared by the State Health Department primarily for general practitioners and will consist of compact carefully edited summaries of "refresher" material, currently accepted drug therapy practices, as well as suggested "working definitions and concepts" relative to tuberculosis that should prove useful in daily practice. A committee of representative general practitioners appointed by the Virginia Academy of General Practice will review each article prior to publication for content in terms of special applicability to general practice.

WILLIAM F. WAGNER, M.D., Director
Division of Tuberculosis Control
Virginia State Department of Health

Floral Eponym

TILLANDSIA

TILLANDS, ELIAS, 1640-1693

Dr. Tillands was born at Smoland, Sweden, studied at Upsula and Turku and graduated at Leyden in 1670. He was professor of medicine and botany at Turku.

Tillandsia is a large genus of tree-perching plants from tropical America. *T. usneoides* is the familiar Spanish moss.

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RADIOACTIVE IODINE IN THE TREATMENT OF HYPERTHYROIDISM

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and
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Radioactive iodine, I-131, has now been established to be of definite therapeutic value in the treatment of hyperthyroidism. Since 1942, when the results of the first treatment of patients with hyperthyroidism with radioactive iodine were reported by Hertz and Roberts[1] and by Hamilton and Lawrence[2], there have appeared numerous reports[3-16] on large series of patients treated with this isotope. The various investigators differ somewhat in the dosage and general management of their patients, but the basic approach is the same, namely, an initial calculated dose of radioactive iodine given orally, with additional doses given as indicated by the subsequent course of the patient.

The purpose of this report is to present our results in a series of sixty-four patients seen at the University of Virginia Hospital from June, 1950, through December, 1952.

SELECTION OF PATIENTS

Patients were selected for therapy with radioactive iodine who fulfilled one or more of the following criteria established by various investigators[8,11,15,17] as indications for therapy:

1. Hyperthyroidism associated with cardiovascular disease.
2. Recurrent or persistent toxicity following thyroidectomy.
3. Failure to obtain a response with antithyroid medications.
4. Hyperthyroidism associated with other serious illnesses such as diabetes mellitus, psychoses, epilepsy, etc.
5. Refusal of surgery or other therapy.
6. Selected cases of uncomplicated hyperthyroidism in the older age group.

DIAGNOSIS AND METHOD OF TREATMENT

The diagnosis was established in all cases mainly on the basis of the usual clinical criteria plus the basal metabolic rate and/or radioactive iodine tracer uptake studies (one hour or twenty-four hour determinations). In regard to the latter, it has been established[19] that the one hour uptake is as reliable as the twenty-four hour uptake in separating hyperthyroid from euthyroid subjects, thus serving to economize on time spent in diagnosis.

The determination of a suitable dose of radioactive iodine for treatment of hyperthyroidism is a problem. Various methods, based on a clinical estimate of gland size and the uptake of a tracer dose of radioactive iodine by the gland, have been used for determining the size of the effective dose, but none have been found to be entirely satisfactory. Two main difficulties are encountered in trying to arrive at the minimal amount of radioactive iodine which will induce a remission. First, the estimation of the size of the intact thyroid gland by palpation is very difficult. At best, it is a "calculated guess" based on previous experience. Second, the ability of the thyroid to accumulate iodine, as measured by the radioactive tracer study, may be depressed due to the previous administration of iodides or certain other drugs known to inhibit the uptake of iodides by the thyroid. These include: Lugol's solution[21], organic iodide compounds used as contrast media in roentgenology (Prodax, Lipiodol, etc.), desiccated thyroid[21,22], thiocyanates[23], drugs of thiourea series such as propylthiouracil[24], ACTH, and cortisone.

The effective doses have been estimated by various authors to vary from 23 to 575 microcuries per gram of thyroid tissue[3,6,20]. Werner and associates[5] have reported that 100 to 200 microcuries per gram was the average amount necessary to induce a remission. The latter schedule works out so that the initial dose is usually 3 to 6.5 millicuries for a toxic goitre of two to three times normal size. Because of the previously described difficulties in estimating the size of the gland and the uptake of the gland in a patient who has received drugs which depress the rate of accumulation we have empirically adopted an initial dose of 3.0 to 6.5 millicuries in most of the cases of diffuse toxic goiter.

It was found that the initial dose needed to be larger in the presence of severe toxicity, nodular goiter, or extremely large diffuse glands. This finding is in agreement with others[5,11,15]. In general, however, an attempt is made to give the smallest dose that may produce a remission with the total dose being governed by the response obtained.

Following the administration of a therapeutic dose of radioactive iodine, the patients were followed at intervals of two to three months until euthyroid. If the initial dose proved inadequate, additional doses were given until the euthyroid state was reached[15].

The patients with cardiac disease and severe hyperthyroidism may get a temporary increase in the severity of symptoms about one to two weeks following a therapeutic dose of radioactive iodine. For this reason this type of patient was maintained on propylthiouracil therapy for one month following therapy to prevent any severe flare up which might be dangerous to a cardiac patient. As a result of this program no serious reactions have been noted in the thyrocardiacs treated with radioactive iodine.

Almost all of the patients were treated on an outpatient basis unless the hyperthyroidism was complicated by another illness requiring hospitalization.

OBSERVATIONS

Since June, 1950, sixty-four patients have received radioactive iodine for treatment of hyperthyroidism. The distribution of these patients as to age, sex, type of gland, and whether they had primary or recurrent hyperthyroidism, is shown in Table I.

As is shown, the group was comprised of 10 males (15.6%) and 54 females (84.4%). Diffusely enlarged glands were present in forty instances (62.5%) and nodular glands in twenty-four instances (37.5%). Of the diffuse goiters, five, or 12.5% were recurrent, all of them in females; whereas, of the nodular goiters, five, or 20.8%, were recurrent, with four, or 80%, occurring in females. All recurrent goiters in this series followed previous subtotal thyroidectomy; none followed previous medical control. In our series, 89.1% of the patients were over forty years of age, and 10.9% under forty years of age. All patients under forty years of age had either recurrent hyperthyroidism or hyperthyroidism complicated by an illness which made surgical treatment hazardous.

The status (as of December, 1952) of sixty-four patients, to whom ninety-five oral doses of radioactive iodine were administered, is shown in Table II.

Six of the original sixty-four patients did not return for follow up examinations, or were unable to be contacted, and are therefore excluded from the analysis of the results. The appraisal of results was made in most cases by following the patient in our clinic until euthyroid. If it was impossible for the patient to return for follow up, a letter was obtained from the referring physician regarding the patient's response to treatment.

TABLE I. DISTRIBUTION OF PATIENTS AS TO AGE, SEX, AND GLAND TYPE

Age Group	Males					Females				
	Number Of Patients	Type Gland				Number Of Patients	Type Gland			
		Diffuse		Nodular			Diffuse		Nodular	
		Primary	Recurrent	Primary	Recurrent		Primary	Recurrent	Primary	Recurrent
20—29						3		1	1	1
30—39	1	1				3	1	1	1	
40—49	3	3				14	7	2	3	2
50—59	3	2			1	16	9	1	5	1
60—69	2	2				11	5		6	
70—79	1	1				6	4		2	
80—89						1			1	
Totals	10	9			1	54	26	5	19	4

TABLE II. STATUS OF PATIENTS AS OF DECEMBER, 1952

Number Of Patients	Remissions	Lost To Follow-up Before Remission	Still Under Treatment	Hypothyroid	Treatment Failure	Recurrence	Deaths
64	54	6	3	4	1	1	2

Remissions were achieved in fifty-four of the fifty-eight patients followed, i.e., signs and symptoms of hyperthyroidism disappeared, and the laboratory signs no longer were suggestive of hyperthyroidism, even though hypothyroidism may have been present. This is an overall remission rate of 93.1%.

Table III shows the total dose range and average total dosage necessary for remissions in fifty-four patients. Patients with diffusely enlarged glands required from 3.75 to 30 millicuries, with an average of 11.48 millicuries. Patients with nodular glands required from 3 to 22.5 millicuries to effect a remission, with an average of 12.28 millicuries. The number of doses necessary to effect a remission is shown in Table IV. Sixty-three per cent required only one dose, whereas 29.6% required two, and 7.4% required three doses.

TABLE III. TOTAL DOSE RANGE AND AVERAGE TOTAL DOSE

Age Group	Diffuse			Nodular		
	Number Patients	Total Dose Range mc	Average Total Dose mc	Number Patients	Total Dose Range mc	Average Total Dose mc
20—29				2	3—31	17.0
30—39	3	3.75—10.0	6.58	1	20.8	20.8
40—49	10	5.0—16.75	10.25	4	6.95—21.1	11.26
50—59	8	7.5—28.0	13.47	7	3.5—20.0	10.17
60—69	6	10—30	15.1	6	3.0—22.5	10.7
70—79	4	7.0—11.5	8.8	2	10—15.4	12.7
80—89				1	22.0	22.0
All Patients	31	3.75—30	11.48	23	3.0—22.5	12.28

COMPLICATIONS

Four of the fifty-four patients in remission developed hypothyroidism (Table II), one, five, six and seven months after conclusion of therapy; an incidence of 7.4%. This complication developed in two patients with nodular glands, and in two with diffusely enlarged glands.

One patient was considered a treatment failure (Table II). This patient experienced an increase in toxicity following each of two doses four months apart, was subsequently rendered euthyroid with antithyroid drugs and Lugol's solution, and then achieved a permanent remission following surgery.

Patients were considered as having had a recurrence if four or more months following a remission, further treatment with radioactive iodine was required. One patient was so considered (Table II) six months following therapy, after having been euthyroid for four months. This is an incidence of 1.9%.

Two deaths occurred in this series (Table II) of undetermined cause, fourteen and eighteen months respectively after receiving therapy; the former was in remission at time of death, and information for the latter in that regard was not available. The death did not appear to be due to therapy with radioactive iodine.

DISCUSSION

The 93.1% remission rate obtained in this series compares favorably with results obtained by other authors, as shown in Table V.

In general, the results of treatment of hyperthyroidism with radioactive iodine have been excellent. The results compare favorably with those reported for the treatment with anti-thyroid drugs followed by subtotal thyroidectomy[26]. The results are better than those reported using antithyroid drugs alone[27,28].

The main advantage of radioactive iodine therapy could be summarized as follows: it is easily administered, hospitalization is not required, post-treatment vocal cord paralysis or hypoparathyroidism have not been noted, drug reactions are eliminated, and the risk of surgery in the thyrocardiac is eliminated.

The incidence of post-therapy myxedema is approximately the same for both radioactive iodine and surgery[25]. It does not constitute a definite disadvantage. The incidence of recurrence of toxicity following radioactive iodine is no greater than that following surgery nor as great as that following anti-thyroid medication alone[25]. Recurrence does not constitute a serious disadvantage because the patient can be retreated with good results[15].

TABLE IV. NUMBER OF DOSES OF I-131 NECESSARY TO ACHIEVE REMISSION

Age Group	One Dose		Two Doses		Three Doses	
	Diffuse	Nodular	Diffuse	Nodular	Diffuse	Nodular
20—29		1		1		
30—39	3					1
40—49	6	1	3	3	1	
50—59	1	7	6		1	
60—69	5	5		1	1	
70—79	4	1		1		
80—89				1		
Totals	19	15	9	7	3	1
Percentage	63.0%		29.6%		7.4%	

A disadvantage of radioactive iodine therapy which should be mentioned is the delay between treatment and the attainment of the euthyroid state. The euthyroid state is usually attained in six to eight weeks unless a patient requires an additional dose. This is usually not a serious problem except in patients with associated cardiac disease. The management of this type of patient has already been discussed.

There is still a question of the possible development of late malignant changes following radioactive iodine therapy especially in young people. Quimby

TABLE V. RESULTS OF I-131 TREATMENT OF HYPERTHYROIDISM

Authors	Year Reported	Number Patients	Percentage Remission
Chapman and Evans[20]	1949	135	85
Soley et al[3]	1949	46	93
Feitelberg et al[7]	1950	290	99
McCullagh and Richards[11]	1951	203	98
Clark et al[13]	1952	384	100

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and Werner[18], who have studied the problem intensively feel that it is unlikely, but that a sufficient time interval has not yet elapsed to make a definite statement. In fifteen years of use of radioactive iodine for the treatment of hyperthyroidism there are no reports of malignancy developing in the patients who have received therapy.

The only definite contraindication for the use of radioactive iodine in this series has been pregnancy. This would appear to be the best policy even though patients have inadvertently received radioactive iodine therapy while pregnant and the progeny has been normal.

SUMMARY AND CONCLUSIONS

1. Radioactive iodine is an effective drug for the treatment of hyperthyroidism.

2. It is especially valuable in recurrent hyperthyroidism and hyperthyroidism associated with cardiovascular disease or some other serious illness which might increase the risk of surgical therapy.

3. The main advantages of radioactive iodine therapy are ease of administration, lack of hospitalization, absence of post-treatment vocal cord paralysis or hypoparathyroidism, and the absence of drug reactions.

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Urge Public Realization of Coroner's Office Welfare Role.

The general public must be educated to realize the important role a well-functioning medical coroner's office plays in their welfare, it was stated in the September 19 J.A.M.A.

Cooperation of the public with the local coroner's office will provide many benefits to the entire community, in the opinion of Drs. Kurt E. Landé and Garrett Boone, Hamilton, Ohio. These benefits include the discovery of the major causes of death, the detection of epidemics, the uncovering or disproof of homicides and the determination of causes of accidents which result in death.

The doctors reported on a survey of the activities of the coroner's office in an Ohio county with a population of 147,203. In the county during 1951 there were 1,405 deaths, and 1,440 in 1952. The coroner's office investigated 305 of the deaths in 1951 and 334 in 1952.

"The preponderance of coroner's cases were sudden deaths from natural causes," the doctors stated. "This is also the group in which the largest number of autopsies were performed; this incidence is similar to that of the whole country. Heart disease, mainly the direct or indirect sequela of coronary arteriosclerosis, is by far the leading cause of sudden, unexpected death.

"Accidents are the next most important group of coroner's cases, with automobile accidents the commonest. Railroad accidents, however, are, in this country, far from rare and are frequently the result of unprotected railroad crossings at which drivers or pedestrians either half asleep and/or intoxicated are caught by a train. Industrial accidents are encountered in the usual frequency, in spite of existing safety programs in the steel and paper mills, machine tool factories, and foundries.

"Although true homicides have been infrequent, suicides are fairly common; among them have been several homicide-suicide situations. Too many sleeping pills, gunshot wounds, and carbon monoxide are employed more often than hanging."

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THE DIAGNOSIS AND TREATMENT OF GLYCOSURIA

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Two major problems encountered in the handling of glycosuria are as follows: (1) the determination of its clinical significance, and (2) the extent of treatment.

Patients having glycosuria can be divided roughly into three groups: Group 1, those having persistent gross glycosuria and markedly abnormal values for blood sugar with or without any combination of polyuria, polydipsia and polyphagia; Group 2, those having intermittent or persistent glycosuria and borderline to slightly abnormal values for blood sugar, usually without symptoms, and Group 3, those having transient or persistent glycosuria with normal values for blood sugar without symptoms.

A diagnosis of diabetes mellitus can usually be made for patients in Group 1 without hesitation or reservation. On the other hand, some patients who are not in either Group 2 or 3 may present real diagnostic problems. Any patient who has glycosuria should be suspected of having diabetes until its presence is disproved. Since the label "diabetic" often carries serious psychologic and financial penalties for the patient, the physician should make every effort to establish a correct diagnosis.

A review of the literature indicates that the criteria for diagnosis often vary with different authorities. The most widely accepted values are those stated by Joslin and associates[1] and the American Diabetes Association Committee on Diabetes Detection[2] to the effect that a fasting value for blood sugar of more than 130 mg. per 100 cc.* associated with glycosuria is diagnostic of diabetes. Because laboratory errors can occur, a diagnosis of diabetes should not be made on the basis of a single abnormal value for blood sugar. Repeated determinations are necessary.

Results of routine urinalyses show that 1 to 2 per cent of all patients are in Groups 2 and 3 and that 15 per cent of these patients show a significant disturbance of glucose tolerance[3]. Because many patients in Groups 2 and 3 will have normal fasting values for blood sugar, the diagnosis will depend on the glucose tolerance test.

*All values for blood sugar mentioned are based on determinations made by the method of Folin and Wu on venous blood.

Moyer and Womack[4], Wilder[5], and Joslin and co-workers[1] stated the opinion that the one-dose standard glucose tolerance test provides the greatest sensitivity, validity, and specificity. The test is administered by giving the patient 100 gm. of glucose by mouth and determining the fasting values for blood sugar a half hour, an hour and two hours after ingestion of the glucose. In order to insure the validity of the results, the patient must be on a normal carbohydrate diet for three to four days prior to the test, and must fast for fourteen hours immediately preceding it. Results for patients having fever, disease of the liver, nephritis, or diseases of the pituitary or adrenal glands or for pregnant women require cautious evaluation since these conditions produce abnormal tolerance curves.

Joslin and associates[1] advocated the following values for a normal one-dose glucose tolerance curve: a fasting value for blood sugar of 130 mg. per 100 cc. or less; a peak of 170 mg. per 100 cc. or less a half hour or an hour after the administration of glucose; a return to 120 mg. per 100 cc. or less in two hours.

Many patients in Groups 2 and 3 will show borderline or bizarre tolerance curves which are difficult to evaluate. It is helpful in these cases to apply a formula advocated by Watson[3] to determine the normalcy of any given tolerance curve: (factor x) $= \frac{F + H + L}{3}$. F indicates the fasting value for blood sugar, H the highest value for blood sugar and L the final or last blood sugar determination. When the value of x is 140 or less, the tolerance curve is normal. Values for x between 140 to 150 should be regarded with suspicion and probably justify a diagnosis of potential diabetes. In such cases the glucose tolerance test should be repeated in three to four months. Values for x exceeding 150 are indicative of diabetes. This method is said to be valid in 90 per cent of all cases.

Group 3 includes patients with persistent glycosuria but with a concentration for blood sugar of less than 170 to 180 mg. per 100 cc. These patients have a lowered renal threshold for glucose. A diagnosis of diabetes is not justified even though they have persistent glycosuria.

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The treatment of diabetes consists of three major components: (1) diet, (2) insulin, (3) education of the patient. The degree of success obtained with the first two is directly proportional to success with the latter.

DIET

Diet is the keystone of diabetic management. The first step in planning a successful diet is the determination of the basal caloric requirements for each twenty-four-hour period. This should be formulated on the patient's ideal or standard weight for his age, sex and height. Basal caloric requirements must not be computed from the patient's actual weight unless that weight corresponds to the standard weight. Weights based on age, sex and height are available in many text books and in medical actuarial* studies of life insurance companies.

The basal caloric requirement can be computed fairly accurately by multiplying the patient's ideal weight in pounds by 10. If the patient is less than 40 years of age add 100 to 200 calories to his basal caloric requirement and if the patient is more than 40 years of age subtract 100 to 200 calories.

The second step is the determination of calories needed in addition to the basal requirement to sustain the patient during his daily activities. The additional calories needed for various levels of activity and occupations are determined as follows:

(1) Elderly sedentary patients need basal calories plus 20 to 30 per cent; (2) housewives, office and white collar workers, basal calories plus 30 to 40 per cent; (3) active young adults, basal calories plus 40 to 60 per cent; (4) laborers and farmers, basal calories plus 60 to 70 per cent, and (5) children, basal calories plus 80 to 100 per cent.

An example is shown for a 45-year-old diabetic man who is 5 feet 10 inches tall and works as an office clerk: standard or ideal weight = 170 pounds $\times$ 10 = 1,700 calories. Subtract 100 calories because patient is more than 40 years of age 1,700 — 100 = 1,600 calories = basal requirement.

Because the patient is an office worker 30 per cent of his basal requirement of calories is added to his basal calories to supply him with sufficient calories for his daily activities. Thus 1,600 + 30 per cent $\times$ 1,600 = 1,600 + 480 calories = 2,080 calories.

The third step is the construction of a diabetic diet based on the caloric requirements of the patient. Diets, to be successful, must be understandable, practical and satisfying to the patient. They must provide a limited intake of carbohydrate and yet supply an adequate amount of protein and fat. In 1950 the American Diabetes Association[6] and the American Dietetics Association[7] together with the Diabetic Branch of the Public Health Service approved and published a new simplified method for planning diabetic diets in an effort to fulfill the demands of patients and physicians. This method, based on exchanges of food, places all suitable foods under six exchange lists; namely, milk, vegetables, fruits, breads, meats and fats (Table 1). Under each list

TABLE 1

FOOD EXCHANGE LISTS

List 1: Milk Exchanges: Each food listed below contains 12 grams of carbohydrate, 8 grams of protein, 10 grams of fat and represents 170 calories.

Food	*Approx. measure 1 exchange*	*Weight (gm.)*
Milk	1 cup (8 oz.)	240
Milk, evaporated	½ cup	120
Milk, powder, whole	¼ cup (3 tbsp. level)	35
Buttermilk	1 cup	240
Milk, skim	1 cup	240

List 2: (A) Vegetable Exchanges: Each food listed below contains negligible amounts of carbohydrate, protein and fat. If more than 1 cup in cooked form is used at one meal it should be calculated as one serving of a Group B vegetable.

Asparagus	Mushrooms	Watercress
Broccoli	Okra	Greens:
Brussels sprouts	Parsley	Beet
Cabbage	Pepper, green	Chard
Cauliflower	Radish	Collard
Celery	Romaine	Dandelion
Chicory	Rhubarb	Kale
Cucumber	Sauerkraut	Mustard
Escarole (endive)	String beans, young	Poke
Egg plant	Summer squash	Spinach
Lettuce	Tomatoes	Turnip

(B) Vegetable Exchanges: Each food listed below contains 7 grams of carbohydrate, 2 grams protein and represents 35 calories.

Carrots	½ cup	100
Beets	½ cup	100
Onions	½ cup	100
Peas, green	½ cup	100
Pumpkin	½ cup	100
Rutabagas	½ cup	100
Squash, winter	½ cup	100
Turnip	½ cup	100

List 3: Fruit Exchanges: Each food listed below contains 10 grams of carbohydrates and represents 40 calories.

*Medico-Actuarial Mortality Investigation, Vol. 1, New York, 1912.

They may be used fresh, dried, cooked, canned or frozen as long as sugar has not been added.

Fruit	*Approx. measure 1 exchange*	*Weight (gm.)*
Apple, 1 small	2 inches, diameter	80
Applesauce	½ cup	100
Apricots, fresh	2 medium	100
Apricots, dry	4 halves	20
Banana	½ small	50
Berries (blackberries, raspberries, strawberries, blueberries)	1 cup	150
	⅔ cup	100
Cantaloupe	¼ (6 inches, diameter)	200
Cherries	10 large—15 small	75
Dates	2	15
Figs, dried	1 small	15
Figs, fresh	2 large	50
Grapefruit	½ small	125
Grapefruit juice	½ cup	100
Grapes	12	75
Grape juice	¼ cup	60
Honeydew melon	⅛ (7 inches, diameter)	150
Mango	½ small	70
Nectarine	1 medium	100
Orange	1 small	100
Orange juice	½ cup	100
Papaya	⅓ medium	100
Peach	1 medium	100
Pear	1 small	100
Pineapple	½ cup, cubed	80
Pineapple juice	⅓ cup	80
Plums	2 medium	100
Prunes, dried	2 medium	25
Raisins	2 tbsp. level	15
Tangerine	1 large	100
Watermelon	1 cup diced	
	1 slice (3 by 1½ inches)	175

List 4: Bread Exchanges: Each food listed below contains 15 grams of carbohydrate, 2 grams of protein and represents 70 calories.

Food	*Approx. measure 1 exchange*	*Weight (gm.)*
Bread, baker's	1 slice	25
Biscuit, roll	2 inches, diameter	35
Muffin	2 inches, diameter	35
Cornbread	1½ inch cube	35
Cereals, cooked	½ cup cooked	100
Cereals, dry (flakes, puffed and shredded)	¾ cup, scant	20
Rice, macaroni, noodles	½ cup cooked	100
Crackers:		
Graham	2 (2½ by 2¾ inches)	20
Oyster	20 (½ cup)	20
Saltines	5 (2 inches square)	20
Soda	3 (2½ by 2½ inches)	20
Round, thin varieties	6 to 8 (½ inch, diameter)	20
Vegetables:		
Beans, peas, dried (cooked); includes blackeyed peas, cowpeas, split peas; lima, navy and kidney beans, etc.	½ cup, scant	100
Corn	⅓ cup or ½ ear	80
Parsnips	½ cup	125
Potatoes		
White, baked	2 inches, diameter	100
White, boiled, mashed	½ cup	100
Sweet or yam	¼ cup	50
Sponge cake, no icing	1½ cube	25
Ice cream, vanilla (omit 2 fat exchanges)	⅛ qt.	70

List 5: Meat Exchanges: Each food listed below contains 7 grams of protein, 5 grams of fat and represents 75 calories.

Food	*Approx. measure 1 exchange*	*Weight (gm.)*
Meat:		
Beef, fowl, lamb, veal (medium fat), liver, pork, ham	1 oz.	30
Coldcuts:		
Salami, minced ham, bologna, cervelot, liver sausage, luncheon loaf	1 slice, (4½ inches, diameter by ⅛ inch)	45
Frankfurter (8-9 per lb.)	1	50
Fish:		
Cod, haddock, halibut, herring, etc.	1 oz.	30
Salmon, tuna, crabmeat, lobster	¼ cup	30
Shrimp, clams, oysters (medium)	5	45
Sardines	3 medium	30
Cheese:		
Cheddar type	1 oz.	30
Cottage	3 tbsp. (level)	45
Egg	1	50

List 6: Fat Exchanges: Each food listed below contains 5 grams of fat and a total of 45 calories.

Food	*Approx. measure 1 exchange*	*Weight (gm.)*
Butter or margarine	1 tsp. level	5
Bacon, crisp	1 slice	10
Cream, light, sweet, sour—20 per cent	2 tbsp. level	30

Cream, heavy—40 per cent	1	tbsp. level	15
Cream cheese	1	tbsp. level	15
French dressing	1	tbsp. level	15
Mayonnaise	1	tsp. level	5
Oil or cooking fat	1	tsp. level	5
Olives	5	small	50

Beverages, condiments and foods allowed as desired:

Coffee	Lemon
Tea	Mustard, dry
Clear broth	Pickles (unsweetened)
Bouillon (fat free)	Saccharine
Gelatin (unsweetened)	Pepper and other spices
Rennet tablets	Vinegar
Rhubarb	
Cranberries (unsweetened)	

are the names and quantities of foods which are similar in caloric values as well as in grams of carbohydrate, fat and protein. From basic meal plans which are computed for 1,200; 1,500; 1,800; 2,200, and 2,600 calories (Tables 2 and 3), an appropriate

TABLE 2

COMPOSITION OF BASIC MEAL PLANS

Diet	Calories	Carbohydrate, gm.	Protein, gm.	Fat, gm.
1	1,200	125	60	50
2	1,500	150	70	70
3	1,800	180	80	80
4	2,200	220	90	100
5	2,600	250	100	130

TABLE 3

SUMMARY OF ALLOWABLE SELECTIONS IN THE BASIC MEAL PLANS

Diet					Meal plan*
1	2	3	4	5	
Calories					
1,200	1,500	1,800	2,200	2,600	
Amount	Amount	Amount	Amount	Amount	Breakfast
1	1	1	1	1	Fruit exchanges from list 3
1	1	1	2	1	Meat exchanges from list 5
1	1	2	2	2	Bread exchanges from list 4
0	1	2	3	3	Fat exchanges from list 6
†	†	†	†	†	Coffee or tea
				1	Milk from list 1
					Lunch or supper
1	2	2	2	2	Meat exchanges from list 5
1	2	2	3	3	Bread exchanges from list 4
†	†	†	†	†	Vegetable exchanges from list 2A
1	1	1	1	1	Fruit exchanges from list 3
0	1	1	2	3	Fat exchanges from list 6
1	1	1	1	1	Milk from list 1
†	†	†	†	†	Coffee or tea
					Dinner or main meal
3	3	3	3	3	Meat exchanges from list 5
1	2	2	3	3	Bread exchanges from list 4
†	†	†	†	†	Vegetable from list 2A
1	1	1	1	1	Vegetable exchanges from list 2B
1	1	1	2	1	Fruit exchanges from list 3
1	1	2	3	5	Fat exchanges from list 6
†	†	†	†	†	Coffee or tea
				1	Milk from list 1
					Bedtime
1	1	1	1	1	Milk from list 1
1	1	2	2	2	Bread exchanges from list 4
0	1	1	1	1	Meat exchanges from list 5
					Midafternoon
				1	Fruit exchange from list 3

* See Table 1 for exchange lists.
† Any amount.

number of selections are allowable from each exchange list for each meal. Appropriate allowable exchanges are so arranged in the meal plan that they correspond satisfactorily to the usual American eating habits for breakfast, lunch and supper. Diets with values for total caloric requirements which occur between the values listed for basic meals are easily altered by adding or subtracting one or more exchange allotments. Meal plans and exchange lists are available to physicians for distribution to patients in booklet form.*

Adequate diet alone will satisfactorily control the diabetes of a large percentage of patients. Patients who are 15 to 20 per cent over-weight, or more, should be placed on a 1,000 to 1,200 calorie diabetic diet and maintained at these caloric values until standard or ideal weights are reached. A diet based on standard weight may then be instituted.

Elderly obese patients, whose diabetes has been discovered late in life, may often be satisfactorily controlled by placing them on a weight reduction diet followed by simple restriction of sugar and pastries. Similarly, patients who are considered potential diabetics should be placed on 1,000 to 1,200 calorie diabetic diets until they have reached standard weight, whereupon simple restriction of carbohydrate may be the only limitation necessary to maintain diabetic control and normal weight. The condition of both types of patients should be followed closely during their lifetime.

INSULIN

Diabetic treatment is designed to maintain standard body weight, normal concentrations of blood sugar and a sugar-free urine. Fifty per cent of patients will be able to meet these requirements by adhering to their diet. The remainder will require insulin. However, of this group requiring insulin, a considerable proportion will be easily controlled and insulin reactions and excessive hyperglycemia will occur infrequently.

Four types of insulin are commonly used. Their actions differ in duration, intensity and speed of onset. A description of each type and its action follows:

Regular and Crystalline Insulin. Clinically these two insulins are indistinguishable. Their action is characterized by almost immediate onset and short duration. After the injection of a moderate dose, concentrations of blood sugar begin falling almost immediately with a maximal action occurring in about three hours. This is followed by a return to original concentrations of blood sugar in about six hours. Because of the brief action of a single dose, and the inability to influence concentrations for long periods, regular or crystalline insulin is now used primarily for emergencies and in combination with longer-acting types of insulin.

Globlin Insulin. This insulin falls between regular and protamine zinc insulin in speed of onset, intensity and duration of action. Initial effects are demonstrable on concentrations of blood sugar in approximately two hours, reaching peak intensity in eight to twelve hours, with a total duration of activity for approximately twenty-four hours. Globin insulin has many disadvantages. It tends to produce hypoglycemia in the late afternoon or evening, but at the same time its action is too weak during the night to control morning fasting values. Because its action is dissipated in twenty-four hours, it does not control post-breakfast hyperglycemia and glycosuria[8]. Globin insulin is activated from its acid solution by alkalization from tissue fluids, and because of the possible variations in degree of precipitation, its effect may vary with each daily injection[9].

Protamine Zinc Insulin. Prolonged action from a single injection gives protamine zinc insulin one of the long-sought characteristics so vital to the maintenance of normal values for blood sugar. A single moderate-size dose releases insulin from its protamine combination slowly with a peak action at twelve to fourteen hours, and exerts continuous depressing action on the blood sugar for twenty-four to thirty-six hours. In many instances protamine zinc insulin also is ineffective in controlling the blood sugar. Because of its relatively retarded lowering of concentrations of blood sugar and the maintenance of these low concentrations for an extended period, post-prandial glycosuria, nocturnal hypoglycemia or both frequently occur[10,11].

Insulin Combinations. In an attempt to provide insulin coverage during the periods of high post-prandial concentrations of blood sugar, various combinations of regular and protamine zinc insulin have been tried. However, excessive amounts of protamine were found to convert a significant portion of the regular insulin to protamine zinc insulin. Col-

*Health Publication Institute, Inc., Raleigh, North Carolina.

well[9] showed that it was necessary to mix at least one part of regular with one part of protamine zinc insulin in order to obtain a definite modification of the action of the latter. Correction of daytime glycosuria and nocturnal hypoglycemia were not obtained until a rate of 2 units of regular to 1 unit of protamine zinc insulin were reached. Sprague[12], by means of clinical trial and error alone, came to the same conclusion, and found the most satisfactory mixtures to lay between 2:1 and 3:1 combinations. One of the major drawbacks of such mixtures lies in the patient's difficulty in preparation and the ever-present possibility of error.

NPH-50 Insulin. Recently a pre-mixed stable unbuffered 2:1 insulin has been developed called NPH-50. This insulin possesses the clinical advantages of the old syringe-mixed 2:1 combinations with an added intermediate time action, and is now considered by many to be its most satisfactory simulator[8,13,14]. Because this new insulin contains only a minimum of unsaturated protamine, regular insulin may be added if needed without comparable loss of its quick action. NPH-50 provides an early and heightened activity during the post-prandial period when concentrations of blood sugar are elevated and a less intense but more prolonged activity at night when the blood sugar is at fasting levels, thus providing action which is distributed and in keeping with the physiologic needs of the diabetic patient. For the majority of patients the timing of NPH-50 insulin represents the most satisfactory action as measured by a minimal number of injections, satisfactory overlap and a relative freedom from hypoglycemic reactions. Compared with other insulins, it shows fewer reactions and when reactions do occur they are more easily recognized by patients[14]. For unknown reasons there is a definite lack of uniformity as to time of day during which reactions occur[15].

EDUCATION

Patients with diabetes require treatment for many years, usually for a lifetime, so that the ultimate responsibility for adequate control falls on the patient. The success that is obtained will depend primarily on the adequacy of the training and understanding which is achieved at the onset of treatment of the diabetes[16]. The responsibility for this training and understanding rests entirely with the physician. Education of the patient cannot be accomplished in one or two brief interviews or by presenting him with a booklet. The physician must review each of the following topics systematically and thoroughly with the patient:

Diet. From a simple non-medical explanation of the underlying physiology of diabetes, the patient can be helped to understand the necessity of diet. Meal planning should be discussed carefully to insure complete understanding of all details. If the patient does not prepare his own meals, it is advantageous to have the person who does prepare them present during the discussion if this is possible.

All diabetic patients should understand clearly the grave consequences of poor control and the dangers associated with obesity.

Insulin. The responsibility for insulin regulation and adjustment falls on the physician until stabilization is achieved. During this initial period, the patient should be instructed regarding the filling of the syringe, self-injection and care of his syringe and equipment. Because of the widespread confusion in understanding the differences between U-40 and U-80 insulin, instructions should be specific on this subject. Syringes showing both U-40 and U-80 scales on the same barrel should never be recommended.

Clinical hypoglycemia is both a physiologic and a social problem which every diabetic taking insulin must guard against constantly. Intelligent treatment of insulin reactions depends on early recognition of symptoms and immediate ingestion of sugar in some form. Therefore, this subject must be discussed in detail with the patient. The many variations of subjective symptoms must be described and the need for prompt action at the earliest suspicion of hypoglycemic symptoms must be emphasized. Every patient should carry mints or hard candy at all times. The effect of unusually vigorous exercise on concentrations of blood sugar also must be included in education of the patient.

Testing the Urine. The simplest home method for testing the urine for sugar is the use of Clinitest Reagent Tablets.* When the interpretation of this method has been mastered, instructions should be given for daily testing before each meal and at bedtime (usually at 7:00 A.M., 11:00 A.M., 4:00 P.M. and 9:00 P.M.), during the first week or until insulin regulation is stabilized by the physician. Thereafter, it is sufficient to test the urine twice daily, 7:00 A.M. (before breakfast) and 4:00 P.M. (be-

*Ames Company, Inc., Elkhart, Indiana.

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fore supper). All tests must be done on fresh specimens obtained fifteen minutes after an initial emptying of the bladder. Every diabetic patient should understand the importance of testing his urine each day for the rest of his life. He must know that in no other way can he accomplish a satisfactory check on the control of his diabetes.

Adjustment of the dosage of insulin at home frequently is necessary in order to meet the changing needs of both the patient and his disease. The following simple and precise instructions may be presented to the patient to help meet this need:

HOME INSTRUCTIONS FOR REGULATING THE DOSE OF NPH-INSULIN

(1) Fresh specimens of urine should be tested twice daily, before breakfast and before supper.

(2) If results of the urine tests are usually 0, with an occasional 1+ (½ per cent) or 2+ (¾ per cent), do not change the dose.

(3) If results of test are 0 for *3* successive days, decrease the dose *2* units if taking 30 units or less; decrease 4 units if taking more than 30 units.

(4) If the result of either urine test during the day is 3+ (1 per cent) or 4+ (2 per cent) for *3* successive days increase the dose *2* units if taking 30 units or less; increase 4 units if taking more than 30 units.

(5) If an insulin reaction occurs which is not caused by unusual exercise or omission of food, decrease the dose the following day by *4* units if taking less than 30 units; decrease 6 to 8 units if taking more than 30 units of insulin.

(6) If you become ill and are unable to eat, *do not stop taking insulin.* If meals are missed and the urine test shows 0, take half the usual dose of insulin. If, however, the urine test shows 3+ (1 per cent) or 4+ (2 per cent) continue to take the full dose.

The following point may be added to the above instructions for those patients taking small doses of insulin or for those who in time might not require further intake of insulin.

(7) If your insulin dosage has been reduced to 6 units of NPH-insulin, and the urine tests have been *0* for fourteen successive days, you may stop taking insulin, but you must continue to test the urine. If the results of the tests shows 2+ (¾ per cent), 3+ (1 per cent), or 4+ (2 per cent), start taking 6 units of NPH-insulin every day. Then raise the dose, if necessary, according to the directions previously mentioned.

Complications. All plans for education of the patient are incomplete without a frank discussion of the frequent outcome of continued poor control. The vascular, neurologic, retinal and renal complications must be clearly understood by all diabetic patients as the possible outcome of continued abuse and neglect. Diabetic acidosis must be included, with a presentation of its cause, signs, symptoms and prevention. Finally, the patient having diabetes should be urged to have a physical check up semi-annually.

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HISTOPLASMOSIS OF THE LARYNX*

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In recent years we have all heard a great deal about the disease entity histoplasmosis. Most of us are well aware of the relationship of this disease to miliary pulmonary calcification. However, there has been a paucity of information in the textbooks and in the literature regarding the active phases both of the benign and fulminating types. The fact that an active case has recently been diagnosed in Virginia should make all of us more conscious of this infection and should stress the importance of knowing the clinical picture, symptoms, signs and methods of diagnosis and treatment of histoplasmosis.

This report, then, of histoplasmosis of the larynx with a discussion of the general chacacteristics of the disease is being presented for two reasons:

1. Less than 20 cases of histoplasmosis of the larynx have been reported in the literature.

2. To give a simplified description of the clinical manifestations and lesions so that you will be alerted and make a provisional diagnosis of this disease and ask the laboratory for confirmation.

Historical Review. Darling observed the first case of histoplasmosis in Panama in 1906.[1] He believed the disease to be a protozoan infection related to Kala-azar. Subsequent work by Demonbreun in 1934 furnished definite proof that the organism is a fungus.[2] It is called histoplasmosis capsulatum and exists in two forms—one, a yeast-like form which grows in the reticuloendothelial system of man, and the other, mycelial, growing outside of the body. Its habitat in nature, modes of transmission, and portal of entry in the human body have as yet not been determined. Nevertheless, most workers agree that the upper gastro-intestinal and respiratory tracts are the most frequent sites of entrance because of the occurrence of early lesions in the mouth, pharynx, larynx and lungs.

Histoplasmosis is a new medical disease. From 1906 to 1926 no new cases were recognized. At the St. Louis Children's Hospital a review of the autopsies since 1918 revealed no cases of histoplasmosis in the pediatric age group prior to 1942.[3] Since that time ten cases of the generalized type have been diagnosed by autopsy in that institution.[4] Up to 1949 a total of 123 cases had been reported in the literature. In the living patient the first histologic diagnosis of histoplasmosis was made in 1941 on biopsy material from the larynx and confirmed by tissue cultures.[5]

Clinically and pathologically we must recognize the existence of two types of histoplasmosis: first, a benign type which is not uncommon in certain areas; and, second, a disseminated or fulminating type which is relatively rare.

Benign Type. Much evidence has been accumulated during the past few years which indicates that a benign, subclinical form of this disease which radiologically simulates tuberculosis is prevalent in some areas of the United States. The signs and symptoms of the active phase of the benign type are those of an atypical pneumonitis which fails to respond to the usual therapeutic measures, but which slowly clears up. It leaves its mark in the form of diffuse minute pulmonary calcification and a positive histoplasmin test. A typical case of the active phase of benign histoplasmosis was reported by Kunstedter, Whitcomb, and Milzer in the *Journal of Laboratory and Clinical Medicine,* December, 1949.[6]

The patient was a twelve year old colored boy with clinical findings of atypical pneumonia. The course of the infection was followed from the onset through the stage of pulmonary infiltration to healing as manifested by beginning pulmonary calcification. H. capsulatum was isolated from the blood and bronchial secretions obtained during the acute stage. The patient had a positive complement fixation test at the height of the pulmonary infiltration which persisted to the time of beginning calcification four months later. He also had a positive histoplasmin skin test.

Disseminated Type. In the disseminated type of

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histoplasmosis the symptoms and signs vary in the individual cases. Initial lesions may be ulcerations or granulations of the nose, mouth, pharynx or larynx, which are extremely painful. Fever is usually low grade, but may be absent. Night sweats, anorexia, weakness, and weight loss occur during some stages of the disease. Characteristically histoplasmosis attacks the reticuloendothelial system with involvement of the liver, spleen, lymph nodes and bone marrow. Thus, there is some degree of lymphadenopathy and enlargement of the liver and spleen. Hypochromic anemia and leukopenia are usually present. Pulmonary lesions occur in about one-half the cases. The adrenal glands are frequently involved with the subsequent development of Addison's disease.

The disseminated type of histoplasmosis must be differentiated from the following diseases:

1. Tuberculosis.
2. Syphilis.
3. Carcinoma.
4. Other fungus diseases, e. g., blastomycosis, coccidiodomycosis, etc.

Histoplasmosis belcngs to the general group of chronic infectious granulomas and it possesses no specific cytologic characteristics which separate it from this group. When it is co-existent with ancther infectious granuloma caused by a specific organism, it is usually impossible to determine microscopically which reaction is caused by histoplasmosis capsulatum and which by the co-existent organism. This simultaneous occurrence of another pathogenic organism with this fungus is not rare. The second type of infection is often tuberculosis.

Diagnosis. The fact that the diagnosis of either benign or disseminated histoplasmosis cannot be made by the clinical examination must be emphasized. Laboratory facilities must be relied upon in making the diagnosis with the following:

1. Histoplasmin test.
2. Complement fixation test.
3. Biopsy.
4. Smear and culture from lesions, blood, bone marrow or sputum.

Prognosis. As to prognosis, in the benign type of histoplasmosis the mortality is low. In the disseminated type the mortality is high.

Treatment. The benign type of histoplasmosis is treated symptomatically and with potassium iodide in massive doses. If the latter is not well tolerated, scdium icdide can be administered intravenously.

Symptomatic and supportive measuree are used in the disseminated type. Treatment with pentnuclectide, fuadin, irradiation, neostam, sodium thiosulfite, sulfonamides, autogenous vaccines and various other drugs have proved of little value. Antibiotics are contraindicated. When penicillin and streptomycin are added to a culture medium they stimulate the growth of histoplasma capsulatum.[7]

Ethyl vanillate, a fungicidal agent which is a by-product of the pulp manufacturing process, shows considerable promise in the treatment of generalized histoplasmosis. Christie treated twelve patients with progressive disseminated histoplasmosis with ethyl vanillate.[8] Five of these patients are alive and apparently well following treatment, an experience not previously encountered or reported in the literature. In infants he recommends a dosage of 0.5 gm. per kilo of body weight per 24 hours in divided doses and this to be increased in steps of 0.5 gm. every five to six days until a dosage of 1.5 gm. per kilo of body weight per day or the desired blood level is obtained. Blood levels must be high—somewhere between 20 and 30 mgm. per 100 cc. Below 10 mgm. per 100 cc. is ineffectual, while above 50 mgm. per 100 cc. may damage the liver and kidneys. Daily blood level determinations are necessary. As deaths have resulted from its use, it is recommended only for severe and critical cases.

Investigators have shown that stilbamidine when tested *in vitro* against histoplasma capsulatum was effective in concentrations from 10 to 100 mgm. per cent.[9] Although this drug has been used successfully in the treatment of blastomycosis, its use in disseminated histoplasmosis has not been too encouraging.[10,11,12] The use of propamidine, which is in the diamidine group with stilbamidine, has been suggested because of its inhibition of certain fungi in low concentrations.[13]

LeJeune reports the prompt subsidence of laryngeal lesions of histoplasmosis using a spray of 5 mgm. of promine every three hours and 4 mgm. of promine intravenously three times a day.[5] However, this patient later showed evidence of involvement of the adrenals. In general, treatment with promine has been discouraging.

CASE REPORT

A 46 year old white male high school instruction

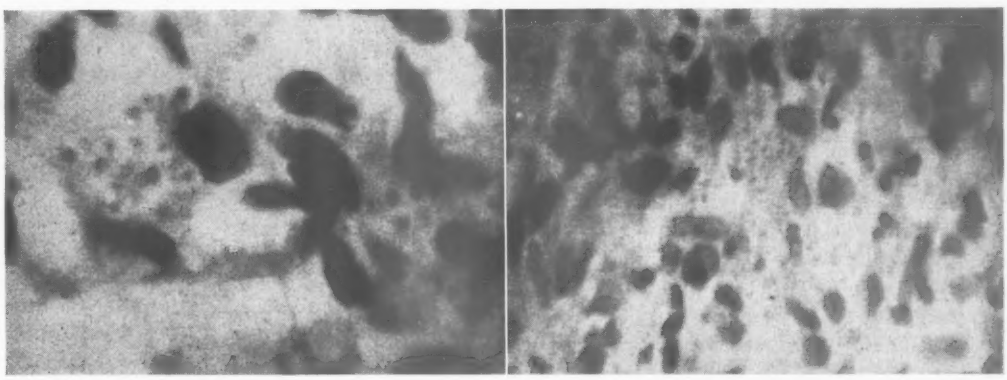
director was referred to our office June 7, 1951, by his family physician because of a granular pharyngitis which did not respond to treatment. He complained of moderate dysphagia and an irritated throat. He had been easily fatigued and listless and had recently recuperated from virus pneumonia. He had lost 25 pounds in weight and had been running a nocturnal fever of 100°F. A review of his past history revealed that several years previously a tentative diagnosis of Boeck's sarcoid had been made.

Examination of the pharynx revealed a granular pharyngitis. Indirect laryngoscopy showed the mucosa of the larynx to be pale and slightly edematous. The epiglottis was quite pale, edematous and was covered by a granulomatous lesion. Our impression was that this patient had a chronic pharyngitis and laryngitis of inflammatory origin. He was treated with the usual local measures, elimination of irritants to the throat, general symptomatic and supportive measures by his family physician, penicillin, chloromycetin and streptomycin with no improvement in the local lesions or in his general condition. A chest x-ray showed minor changes suggestive of Boeck's sarcoid which had been seen on previous x-rays and no change was reported. On July 2, 1951, tissue was removed from the epiglottis for biopsy. From this tissue a diagnosis of histoplasmosis was made.

The patient was sent to the University of Virginia Hospital. The histoplasmin intradermal test was negative in a dilution of 1:10,000. However, complement fixation test was positive in a dilution of 1:2,048. Two small grayish brown ulcers with thick crusts were found in the left parieto-occipital area and two similar lesions were in the left malar region. Biopsy from one of the scalp lesions showed histoplasmosis. A diagnosis of disseminated histoplasmosis was made.

On July 25, 1951, the patient was started on large doses of ethyl vanillate. On August 1, he had an Addisonian crisis which was successfully combated with adrenal cortical extract, whole blood, and glucose in physiologic saline. Subsequently, the symptoms were well controlled with cortisone.

On August 13, 1951, the patient was transferred to the Veterans Administration Hospital, Roanoke, Virginia, where the same regime was continued. A very complete discussion of the treatment of this patient here was published by Drs. Ellis, Scott and Miller in the *Journal of Antibiotics and Chemotherapy*, July, 1952.[14]



Photomicrograph of tissue from epiglottis showing histoplasmosis capsulatum

The ethyl vanillate was given intermittently in increasing doses until by October 10 he was receiving 6 gms. every four hours. On November 25 the administration of ethyl vanillate was discontinued. During the last month of therapy a blood level between 15 and 28 mgm. per cent was maintained.

From August to December the patient gained 51 pounds in weight. In October and November all of the cutaneous lesions, except one, healed. The latter, a lesion of the elbow, finally healed in January, 1952. However, the granulomatous lesion of the epiglottis remained the same. Because of the *in vitro* studies showing the effectiveness of diamidines against fungi, a decision was made to use propamidine locally on the epiglottis.[13] Since the action of propamidine is stepped-up by varidase, this drug was likewise used locally preceding the pro-

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pamidine. Accordingly, the patient received two courses of propamidine and varidase sprayed locally on the epiglottis four times a day for fourteen days. Shortly after the last course, the epiglottis appeared normal, except for scarring.

During this course of treatment and continuing up to the present time, the patient has received specific treatment for the Addison's disease.

The patient has gotten along well and has shown no signs of recurrence of the lesions of histoplasmosis. Thus, one would conclude that in this patient a remission in progressive disseminated histoplasmosis was apparently induced.

Laryngeal Findings. The laryngeal findings of histoplasmosis are characterized by extreme edema of the laryngeal mucosa and by the presence of granulomatous lesions which may be diffuse or nodular. These lesions bleed less when traumatized than do most granulomatous lesions. Dean reports a case where the epiglottis was thick, nodular and pale and the whole interior of the larynx white and nodular.[5] Clerf describes a case of laryngeal histoplasmosis which closely resembled carcinoma.[5]

When extreme edema with granulomatous lesions are present in any chronic laryngeal condition, one should be alerted for possible histoplasmosis.

In conclusion, I would like to emphasize several points:

1. Histoplasmosis is a relatively new disease caused by a fungus which requires additional emphasis on diagnosis.
2. It is related to minute, diffuse pulmonary calcification.
3. The active phase of the benign type may simulate atypical pneumonia and is frequently undiagnosed. It has a good prognosis.
4. Disseminated histoplasmosis is relatively rare and has a high mortality. It must be differtiated from other granulomas.
5. Ethyl vanillate shows definite promise in the treatment of progressive disseminated histoplasmosis. Propamidine may be of use in the treatment of histoplasmosis of the larynx.
6. When edema and granulomatous lesions of the mouth, pharynx and larynx are seen, histoplasmosis should be ruled out.

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Medical Arts Building.

ADENOCARCINOMA OF THE SMALL BOWEL

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Malignant tumors of the small bowel are infrequent compared with the other parts of the gastro-intestinal tract. Raiford[2] reports that 11% of 986 gastro-intestinal tumors occurred in the small bowel. Of these 42% were malignant. The Armed Forces Institute of Pathology records 146 malignant small bowel tumors classified as follows: Leiomyosarcoma (34 cases recorded), lymphosarcoma (2 cases recorded), malignant carcinoid (28 cases recorded), adenocarcinoma (78 cases recorded), neurofibrosarcoma (1 case recorded), fibrosarcoma (2 cases recorded), hemangioendothelioma (1 case recorded). Mayo[1] reported 66 cases of adenocarcinoma of the small bowel of which only eight were alive five years after surgery. He attributed the poor prognosis to the high incidence of metastases already present at the time of diagnosis. This emphasizes the necessity of the awareness of such lesions when considering the differential diagnosis of intestinal obstruction.

The following case is typical in that it shows the usual presenting symptoms of intestinal obstruction and the distant metastases present at the time of diagnosis.

REPORT OF CASE

A 53 year old white female was admitted to the U.S. Army Hospital, Fort Belvoir, Virginia, 15 October 1952, with a history of nausea and vomiting for approximately six weeks. The vomiting occurred usually three to four hours after the evening meal. There was no pain. The symptoms occurred during a time of emotional and physical stress and her doctor attributed the nausea to psychic reasons. She was treated with belladonna. The vomiting became worse, however, and began to occur three to four hours after every meal. She was scheduled to have a gastro-intestinal x-ray series as an out-patient. However, a few days later she vomited several times and had a severe constricting pain in the lower thorax, radiating into the back, with profuse perspiration and weakness. She was admitted to the hospital with an admission diagnosis of cholecystitis. System review and past history were not contributory. Positive physical findings were limited to the abdomen which showed a slight tenderness to the left of the umbilicus. There was no distention. Peristalsis was normal. She was scheduled to have a gall bladder series and gastro-intestinal series. A flat plate of the abdomen revealed nothing significant. Gastro-intestinal series, taken on 25 October 1952, surprisingly showed a nearly complete obstruction in the jejunum approximately twelve inches below the ligament of Treitz (Fig. 1). The jejunum proximal to this obstruction was tremendously dilated. An x-ray diagnosis of intussusception, adhesions or gallstone ileus was made. At this time she was seen by the Surgical Service and it was decided to do an operation as soon as she could be prepared. The pre-operative diagnosis was benign or malignant neoplasm of the jejunum. She was operated on 26 October 1952 through a left upper rectus incision. The proximal twelve inches of jejunum was found to be tremendously dilated and thickened above a napkin-ring type obstructing carcinoma. Bowel distal to this was collapsed. Regional lymph nodes were enlarged and hard. There were multiple peritoneal implants over the serosal surface of the entire bowel, over the peritoneum of the anterior abdominal wall and on the serosa of the liver. It was decided that, although any surgery would be purely palliative, a resection of the tumor would be done to relieve the obstruction. The tumor, adjacent bowel, and regional vessels and lymphatics were removed. Bowel continuity was restored by end to end anastomosis, doing a dorsal slit on the distal stump to make the lumen large enough to fit the distended proximal portion. The mesentery was repaired and the abdominal wall closed in layers. Post-operative course was uneventful. A Wangensteen suction was used for forty-eight hours until peristalsis began. She was then given a soft diet. The wound healed cleanly and she was discharged on the tenth post-operative day. Since discharge she has been followed as an out-patient. On the 17th of February 1953 (four months postoperative) the patient was symptom free and eating a regular diet. By April 1953 she had begun to have mild recurrence of obstructive symptoms. Pathological examination of the resected

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bowel (Fig. 2) was done by Lt. Arthur B. Chandler as follows: "Arising in the wall of jejunum is a fungating adenocarcinoma, 2.5 x 2.0 x 2.0 cm.; situated 10 cm. from the proximal and 6.0 cm. from

Fig. 1. X-ray showing barium in dilated proximal portion of jejunum with beak-like obstructed end. Note absence of barium below obstruction.

the distal surgical margin, which almost completely occludes the lumen over a distance of 2.5 cm. The carcinoma invades through the wall, and out to the

Fig. 2. Resected portion of jejunum showing:
(1) Dilated proximal portion
(2) Annular carcinoma
(3) Normal distal portion

serosa at the point of a narrow fibrous band-like constriction which circumscribes the bowel with the exception of a space, 0.8 cm., on the abmesenteric side. There is much hypertrophy of the circular muscularis of the proximal jejunum which is dilated to a diameter of 5.5 cm. The diameter of the distal lumen is 2.5 cm. Microscopically the carcinoma is fairly well differentiated; there is a slight central degeneration. *Diagnosis:* Adenocarcinoma, jejunum."

DISCUSSION

Adenocarcinoma of the small bowel may rise from polyps as it does in the large bowel. Adenocarcinoma of the duodenum is uncommon except for those arising in the peri-ampullary region.[3] Other adenocarcinomas are distributed fairly evenly throughout the jejunum and ileum though some series report them more numerous in the jejunum. These carcinomas are often constricting, forming an annular ring about the lumen and completely obstructing the bowel. Microscopically the carcinomas are glandular in nature, showing variable degrees of differentiation, and often extending through all layers to the serosal surface. Symptoms of carcinoma of the small bowel usually are those of obstruction with intermittent pain, nausea, vomiting, and later distention and constipation. Bleeding may occur. Physical examination may reveal distention and perhaps visible peristalsis and borborygmii. Carcinomas of the small bowel are usually not palpable. Benign tumors and polyps may lead to intussusception; however, adenocarcinomas do not usually cause this. Radioscopic examination may show only obstruction with dilated bowel above it. This differentiates adenocarcinoma from lymphosarcoma which usually presents a long thin segment of bowel, giving a garden hose appearance. Treatment is surgical excision.

SUMMARY

(1) A case of adenocarcinoma of the jejunum is presented.
(2) The clinical picture was that of high intestinal obstruction.
(3) Malignant small bowel lesions are frequent enough to warrant serious consideration in the differential diagnosis of small bowel obstruction.
(4) Prognosis is poor because of early metastases.

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Medical Society of Virginia Cancer Committee

Chairman, George Cooper, Jr., M. D.

Albemarle Hotel Building, Charlottesville, Va.

Reprints of this and preceding Bulletins may be obtained from this office

December 1, 1953

Cancer of the Urinary Tract

Lee and Davis, urologists who, judging by their names, should be practicing in Confederate territory but who are actually at the University of Nebraska, are the authors of an article entitled "Gross Urinary Hemorrhage: A Symptom, Not A Disease", which was published in the October 31 Journal of the American Medical Association.

In reviewing the records of 1,000 consecutive patients with the symptom of gross hematuria, they found the following interesting data.

The patients' age range was 5 to 94 years, but 73.7 per cent were 40 or over.

There were 666 males, 334 females, a ratio of two to one.

A urologist was seen by 53.6 per cent of the patients within one month of the first episode of gross hematuria. That is, almost half did not receive the benefit of urological investigation for over a month, and in 27.1 per cent, six months or longer elapsed.

In approximately one-fifth of the patients, the bleeding was not associated with pain.

In approximately one-half, a diagnosis was established by simple office cystoscopy or other office procedures. The other half required complete hospital study.

In eight per cent, no cause for the bleeding could be found.

Frequent diagnoses included calculus — 10.5 per cent, benign prostatic hyperplasia— 12.5 per cent, cystitis — 22 per cent, and tumor — 22 per cent.

The following case histories are recorded in our Tumor Clinics:

1. A 54 year old white man, who had suffered from intermittent hematuria for two years, had, in that time, repeatedly sought the advice of several physicians. He had been treated for cystitis, prostatitis, and epididymitis, but was at length referred to a urologist. He noted a readily palpable mass in the left kidney region. Complete study revealed an inoperable tumor of the left kidney and bilateral pulmonary metastases.

2. A 62 year old white man had an episode of hematuria which was incompletely investigated by his physician. Bleeding did not recur and the incident was forgotten, though a steady loss of weight and strength followed. One year later, after losing 50 pounds, he was sent to a hospital in an attack of R. U. Q. pain accompanied by nausea and vomiting. There was a filling defect in the right pyelogram. On exploration, an inoperable carcinoma of the right kidney was found with metastases to the liver.

3. A 34 year old white woman had been under a physician's care for two years because of intermittent mild hematuria. The condition was not carefully studied nor was any particular significance attached to it until she had a severe hemorrhage. Urological consultation was then requested. On cystoscopy, a papillary carcinoma of the bladder 6 cm. in diameter was found.

Comment: Regardless of age or sex, gross hematuria is a startling event demanding the immediate attention of a competent urologist. The absence of pain in no way detracts from the significance of the symptom which, as Lee and Davis point out, is one of the most important single painless warnings of disease. Though the bleeding may be due to non-malignant intrinsic urinary lesions, to lesions of adjacent organs, or to complications of a medical or systemic disease, many of these conditions require emergency treatment and in a series of 1,000 consecutive patients, bleeding was due to urinary tract cancer in better than one out of every five patients.

As in all cancer, the only hope of cure for malignant tumors of the urinary tract lies in their discovery before distant metastasis. Only the urologist has the equipment and skill to find and treat tumors in this location, but in late cases, his talent is of little practical value. *Give him and your patient a fair chance by referring immediately all cases of urinary hemorrhage!*

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NOTES ON PULMONARY TUBERCULOSIS

Modern Therapy (I) including Drug Therapy Methods

The full impact of specific medicinal therapy and modern surgery upon tuberculosis has not yet been determined.

To date, nothing is known about the new treatment aids to justify the slightest relaxation of effort to expand and financially implement standard time-tested tuberculosis control measures. Indeed, new discoveries and therapeutic procedures should serve to accelerate existing programs for only by these means can potentialities of each new weapon be fully exploited.

Surgery has obvious limitations.

Nor has it *yet* been proven that any new drug or combination of drugs is *completely* curative, *even for the earliest of minimal lesions,* or for healing the residual active foci which invariably remain following *any* type of surgical extirpation.

BASIC TREATMENT

It is strongly urged that practicing physicians continue to prescribe systemic (body)* rest as *basic* treatment for *all* cases of active pulmonary tuberculosis. Surgery and drugs should be employed primarily as adjuvants to, or as partial substitutes for, systemic rest. In the present state of knowledge any other course would be extremely hazardous and ill-advised.

Basic treatment of active pulmonary tuberculosis consists essentially of a trial rest schedule, in bed or out, followed by such modification as may be indicated to contribute whatever share may be demanded of it to achieve over-all treatment requirements. Need for alteration of a rest schedule will be determined by the patient's progress or lack of progress, in response to the one in force, and as influenced by ancillary collapse therapy, surgical or medical aids, when prescribed.

While time-honored advice to patients, that "all that is not rest is exercise" is still a wholesome point of view to bear in mind, sight should not be lost of the fact that the *reverse* is *also* true and equally important, i.e., "all that is not exercise is rest"; inherently, the two are mutually exclusive. Accordingly, systemic rest, whenever taken during the day, contributes to the *sum total* obtained each twenty-four hours. In any given case, as long as *any* rest is taken *expressly* for the purpose of "controlling", or for permanent healing (clinically) of active tuberculosis, not only is it simpler but much more practical and realistic to regard *all* rest obtained each twenty-four hour period as part and parcel of basic treatment.

*Includes, but is by no means limited to, rest-in-bed.

SANATORIUM CARE—IN A SANATORIUM

Need of sanatorium care, or the equivalent, is, for the most part, to be considered categorical when sputum is positive for tubercle bacilli on direct examination (smear) or by concentrate, regardless of stage of disease; when x-ray shows a far-advanced active lesion with or without cavitation even though sputum or gastric lavage culture be positive only intermittently; when x-ray shows a moderately advanced lesion with cavitation; when lesion visualized by x-ray appears to be highly unstable; when patient is persistently febrile. Exceptions would be the occasional "good chronic" for whom a sanatorium has little to offer by way of treatment and whose home environment and sense of responsibility in relation to degree of communicability, are such as not to expose others to undue risk of infection.

Patients in categories other than these will be recommended by many physicians for sanatorium care and properly so but, in general, it is requested that applications be limited to patients having a *definite* diagnosis of tuberculosis, and whose need for hospitalization is based upon what the attending physician considers to be a clear-cut medical and/or surgical need (in contrast to "rule of thumb"). In this way, not only can sanatorium beds be utilized to the best advantage, but many *needless* castastrophic adjustments and sacrifices can be obviated for patients given a chance to prove they can get well "on the hoof", as mass x-ray surveys indicate six out of ten of their neighbors and friends, diagnosed as tuberculous, have already done.

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SANATORIUM CARE IN THE HOME—A POOR EXPEDIENT

The safest place by far for the great majority of tuberculous patients *recommended* for sanatorium care, *or the equivalent*, is to accept treatment in a sanatorium, and *to forget the equivalent*, except as a temporary expedient while awaiting placement.

When prescribed sanatorium care cannot be secured promptly the patient should be put to bed at home; with few exceptions drug therapy will be employed concurrently. (Ninety per cent or more of patients in the State sanatoria receive specific drug therapy).

DRUG THERAPY METHODS

Streptomycin (plain), P.A.S., and Isoniazid, are each recognized as extremely useful agents in modern treatment of tuberculosis. All are available at our State sanatoria.

Consensus now appears to be that none of the drugs should be prescribed alone. P.A.S., by itself, is not too effective therapeutically in non-toxic amounts. When streptomycin is administered alone, one gram daily, some degree of vertigo and deafness can be expected to appear in less than fifty days, and a very high percentage of the tubercle bacilli will have become resistant to the drug. When the same dosage is given twice weekly, toxic effects are seldom observed, emergence of resistant organisms in numbers sufficient to jeopardize therapeutic effectiveness, is delayed for as long as four months. Isoniazid, when given alone, is almost devoid of toxic effects when properly administered, but produces resistant strains even more rapidly than does streptomycin, alone. *But* when streptomycin (twice weekly) is used with either P.A.S. or Isoniazid, evolution of strains resistant to the individual components of either combination is *tremendously* retarded, and the therapeutic effectiveness of each drug is prolonged almost indefinitely. Moreover, some degree of synergism is thought to exist under combined therapy.

AVERAGE DOSAGE

Currently "standard" average dosage for practically all adults* consists of streptomycin (plain) grams one, twice weekly, combined with P.A.S. grams twelve daily, and/or Isoniazid 3-5 mgms per kilo body weight, with a recent trend toward the higher dosage.

Isoniazid may be substituted where P.A.S. is not well tolerated, usually because of gastro-intestinal symptoms; either drug (with streptomycin) may be substituted for or added to the other, when lesions fail to respond satisfactorily, or where there is some idiosyncrasy.

Possible benefits which might obtain from combined use of P.A.S. and Isoniazid (without streptomycin) have not been fully explored at the State sanatoria or elsewhere. A number of studies, as yet unreported, are in progress in other States to determine this, as well as to ascertain the capacity of each to retard evolution of resistant strains to the other; research, if successful in this field, would of course, reduce over-all cost of drug therapy and obviate use of a needle for administration.

There are some who advocate routine use of all three drugs from the beginning, but most physicians prefer to individualize their treatment practices to the extent described above.

Dihydro-streptomycin is no longer being used as widely as formerly, because the drug seems to be no more effective therapeutically than plain streptomycin, and it apparently has a greater tendency to cause some degree of lasting deafness—occasionally *beginning* several months after the drug is discontinued. However, it can be tried in instances where plain streptomycin is not well tolerated.

A combination of streptomycin and dihydro-streptomycin in equal parts has recently been made available commercially, but to date has not been used upon an extensive scale at any of the State Sanatoria in Virginia; when streptomycin and dihydro-streptomycin are given together and in the same total dosage as with either drug alone, the combination is reputed to have fewer toxic effects on the eighth cranial nerve than with either drug alone.

MILIARY TUBERCULOSIS, MENINGITIS, PNEUMONIA

In miliary tuberculosis and tuberculous meningitis, and in many cases with acute pulmonary involvement it is advisable, in adults, to increase streptomycin dosage to one to two grams daily. This dosage may usually be maintained safely for several weeks without adverse effect but should be reduced to the recommended twice weekly administration as soon as the patient's condition warrants it. Where streptomycin is administered daily in this manner, a com-

*Dosages of streptomycin and P.A.S. for children, are usually decreased in proportion to weight. In adults, it is customary not to greatly vary dosage, irrespective of weight.

bination of streptomycin and dihydro-streptomycin might be worthy of consideration as an added precaution!

P.A.S. in routine amounts as recommended above should be prescribed concurrently. Isoniazid should always be included in treatment of the acutely ill case because of its well known ability to penetrate and effect high body fluid concentration (including spinal fluid), as well as its not infrequently observed propensity to bring about a very rapid reduction in acuity of symptoms. Up to seven mgm per kilo body weight may be used. In this dosage, however, frequent check of reflexes should be made, since excessive irritation of the central nervous system, even convulsions, may result. Such combined use of Isoniazid makes unnecessary the intrathecal use of streptomycin; the latter has for some time been virtually abandoned for injection by this route because of chemical irritation of meninges, adhesion formation, and obstruction to circulation of spinal fluid, resulting in permanent brain damage with mental retardation, or worse, in many of those who survive.

Caution should be exercised in the administration of any of the drugs in patients with poor kidney function, where usual amounts may produce symptoms of over-dosage.

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Sanatorium applicants awaiting notification of a vacancy sometimes improve so much symptomatically while on drug therapy at home that their applications are cancelled.

Just as patients have *always* been cautioned against misinterpretation of the rapid symptomatic improvement often observed within a few weeks or months after going to bed, so the larger group today, who respond "miraculously" to the new combination of systemic rest and drug therapy, must be warned not to regard an early *alleviation* of symptoms as the most important yardstick for measuring speed of recovery. *Complete elimination* of *all* symptoms is a sine qua non, *if* the goal is *cure* rather than "control", and this may require many months in the patient whose original need for sanatorium care was well-founded. Clearing of shadows on x-ray caused by tuberculous processes, does not begin to keep pace with symptomatic improvement—under *any* form of therapy.

This should be explained carefully to every sanatorium applicant and his family, *before any* form of treatment is initiated at home.

Clearly, therefore, cancellation of an application should never be considered except upon a basis of total re-evaluation of the patient's condition (including x-ray); where possible the record of "sanatorium care at home" should be reviewed, and where practicable, the patient should be examined by a tuberculosis specialist at this crucial point, to be "doubly sure". Upon one of the darkest pages in the history of tuberculosis is recorded the huge roster of *curable* patients—who took only enough treatment to keep from dying (too soon!). Let it *never* be said of the new drugs that "They made it possible for *more* people to get *half* well *sooner!*"

A Christmas Tradition.

The sight of happy children singing carols is symbolic of Christmas, of the spirit of giving that belongs to the season. The National Tuberculosis Association and its 3,000 affiliated associations have chosen this symbol for 1953 as an expression of their major objective—to prevent and control the spread of tuberculosis—so that our young people may grow up in a healthier, happier world.

Here in our state, the Virginia Tuberculosis Association was organized in 1909 and since that time 112 local associations have been developed. These voluntary organizations include physicians and laymen from all walks of life, who give freely of their talents and of their means, to further the cause of tuberculosis control and eventual eradication.

The season is approaching when you and your neighbors will be asked to make your annual contribution through the purchase of Tuberculosis Christmas Seals. This marks the 47th year that these little stamps have financed the work of our voluntary associations. Your purchase of Christmas Seals will be deeply appreciated.

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MEDICO-LEGAL NOTES

Workmen's Compensation for Tuberculosis in Hospital Employees

Since 1944 the Virginia Workmen's Compensation statute has recognized the compensability of occupational diseases, as distinct from traumatic or accidental injuries. In 1952 the Virginia Workmen's Compensation statute was amended to give broader recognition to occupational diseases, especially to infectious or contagious diseases acquired in the course of employment in hospitals or sanatariums. The pertinent section of the Virginia State Workmen's Compensation Statute (Title 65, Virginia Code (Michie) Section 65-42) now reads as follows:

SECTION 65-42. OCCUPATIONAL DISEASE DEFINED

As used in this Act, unless the context clearly indicates otherwise, the term "occupational disease" means a disease arising out of and in the course of the employment. No ordinary disease of life to which the general public is exposed outside of the employment shall be compensable, except: (1) when it follows as an incident of occupational disease as defined in this law; or (2) when it is an infectious or contagious disease contracted in the course of employment in a hospital or sanatarium.

A disease shall be deemed to rise out of the employment only if there is apparent to the rational mind, upon consideration of all the circumstances:

(1) A direct causal connection between the conditions under which the work is performed and the occupational disease.
(2) It can be seen to have followed as a natural incident of the work as a result of the exposure occasioned by the nature of the employment.
(3) It can be fairly traced to the employment as the proximate cause.
(4) It does not come from a hazard to which the workmen would have been equally exposed outside of the employment.
(5) It is incidental to the character of the business and not independent of the relation of employer and employee, and
(6) It must appear to have had its origin in a risk connected with the employment and to have flowed from that source as a natural consequence, though it need not have been foreseen or expected before its contraction.

An infectious or contagious disease contracted in the course of the employment in a hospital or sanatarium may therefore be compensable when it otherwise satisfies the criteria enumerated for an occupational disease in subparagraphs one through six. Prior to 1952 the law provided that in order not to be excluded as an ordinary disease to which the public was generally exposed an infectious or contagious disease would have to be acquired in the course of the employment in a hospital or sanatarium regularly caring for patients with the disease in question as a general practice or, part of their business. Under this prior statute a general duty nurse in a general hospital was denied compensation.

Tuberculosis contracted by student or graduate nurses assigned to duties requiring the nursing of tuberculous patients has now been accepted as compensable.

The law is less liberal when the source of exposure to tuberculosis is a fellow employee. Thus when a cook is exposed to a tuberculous food handler, in a general hospital having a large tuberculosis inpatient service, the exposure may nevertheless be regarded as only a happenstance of the employment and not the product of it, and not related to that special risk associated with the operation of the hospital or sanatarium.

The mere general statistical risk of the hospital physician, nurse or other employee, based on comparative tuberculosis rates between such personnel and the general population, is probably insufficient to satisfy the requirements of the statute. Although it is not required that the time, place and circumstances of the specific causative exposure be conclusively shown, it is necessary to produce evidence which will fairly demonstrate to the rational mind that the disease can be traced to the employment as the proximate cause.

The increased risk incurred by hospital personnel providing direct care for tuberculous patients is obviously meant to be covered by the statute, but Workmen's Compensation is not general health insurance.

A claim under the Virginia Workmen's Compensation Act for tuberculosis in a hospital or sanatarium employee should include the following elements: (1) present tuberculosis—bacteriologically

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proven, (2) absence of disease prior to hospital employment—perhaps the best evidence being a negative chest x-ray on pre-employment physical examination, (3) absence of significant specific exposure outside of the employment, (4) duties requiring substantial contact with proven active tuberculous patients or material from these patients, preferably documented in detail.

Contributed by:
CHARLES W. WHITMORE, M.D., L.L.B.
University of Virginia Hospital and Medical School,
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New Books.

We give below names of some of the newer books in the Tompkins-McCaw Library of the Medical College of Virginia, Richmond. These are available to our readers under usual library rules.

Ackernecht—Rudolph Virchow: doctor, statesman, anthropologist. 1953.
Brailsford—The radiology of bones and joints. 5th ed., 1953.
Brock—The basis of clinical neurology. 3d ed., 1953.
Colby—Essential urology. 2d ed., 1953.
Collins—The pathology of articular and spinal diseases. 1949.
Cope—The early diagnosis of the acute abdomen. 10th ed., 1951.
Ficarra—A psychosomatic approach to surgery. 1951.
Frimann-Dahl—Roentgen examinations in acute abdominal disease. 1951.
Hyman—Handbook of differential diagnosis. 1953.
Novak & Novak—Textbook of gynecology. 4th ed., 1952.
Pomeranz & Koll—The family physician. 1953.
Ritvo—Roentgen diagnosis of diseases of the skull. Vol. 19, 1949.
Shanks & Kerley—A textbook of X-ray diagnosis. 2d ed., 1950-51. 4v.
Shock—A classified bibliography of gerontology and geriatrics. 1951.
Sophian, et al.—The sulfapyrimidines. 1952.
Storch—Fundamentals of clinical fluoroscopy. 1951.
Strong & Elwyn—Human neuroanatomy. 3d ed., 1953.
Tait—Textbook of refraction. 1951.
Wesson—Urologic roentgenology. 3d ed., 1950.
Williams—Careers in medicine. 1952.

AMEF '53 Goal in Sight.

Nearing its 1953 goal of one million dollars, the American Medical Education Foundation reports that donations so far this year have amounted to more than $950,000 from 15,151 contributors. With more than a month remaining of the current year, there is a good chance that the Foundation will reach its goal. The above figures already have established a new record. In 1951, the first year of operation, the Foundation raised $745,000 from 1,836 contributors and last year's receipts totaled $906,553 from 7,259 donors.

In reporting the new income figures, Dr. Louis H. Bauer, Foundation vice-president, pointed out that almost every state and local committee has stepped up activity in conjunction with the national direct mail compaign in an effort to raise additional funds for the country's medical schools. Types of campaigns have varied throughout the nation . . . in some states the committees are using a personal solicitation method while others have adopted voluntary assessments or increasing society dues. Both Illinois and Utah, for example, have voted a $20 increase in state society dues. During the first 10 months of 1953, Illinois raised more than $179,000.

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MENTAL HEALTH

JOSEPH E. BARRETT, M.D.
Commissioner, Department Mental Hygiene and Hospitals

The Dull Child*

Every doctor who is in general or pediatric practice has brought to him from time to time children who are slightly backward in their development, in their school work and in their social relationships. It is soon clear that they are not mental defectives, but it is also seen that they are not entirely normal. The parents, the school (and, frequently, the doctor) does not understand them nor know what to do to help them.

The individual who exhibits an easily recognized defect in intelligence usually receives the care, protection, and special education which he needs and requires. In the lower grades of mental deficiency, this is either institutionalization or else a watchful care in the family home which is in a general sense the equivalent of what he could receive in the institution. Even the higher grades of mental defect frequently go to a state school or its equivalent, where they live during their years of development in an environment that protects them by not demanding too much of them, by segregating them from competition with brighter children, and by confining their education to material which they are capable of assimilating. Such an individual is cared for by the special facilities which have been developed to aid him in his adjustment to life. A different situation, however, exists among the high grade defectives and individuals of borderline intelligence who spend all their lives (and especially their childhood) in the community with their families. We are thinking, in general, of children whose mental level is indicated by intelligence quotients between seventy and eighty-five. Relatively few of these persons reach institutions. They remain in the community, dependent upon resources which are provided for their brighter brothers and sisters and which are woefully inadequate for their needs.

Sometimes the referral is for a reason that is obviously an expression of the intellectual retardation, such as inability to make progress in school, difficulty in learning, etc. More frequently, however, it is some other aspect of behavior that creates a problem and brings the child to the doctor. There may be stealing, truancy, delinquency in matters of sex, inability of parents to control, rebellion against authority, and a host of other difficulties. But when examination brings to light the mental defect which had previously been given scant consideration, its place as a basic factor in the maladjustment becomes clear and it is seen how all the other manifestations are more or less directly dependent upon the lack of intelligence. We do not mean, of course, that other causative factors are lacking, but only that the intellectual deficiency is the one thing necessary to activate them to the point of causing abnormalities of behavior.

The best answer that has been given by our schools to the problems of these slightly backward children has been the providing of special classes, classes in which they can proceed at a rate in keeping with their own abilities and not feel the intense sense of failure that comes from the impossible competition with children of normal intelligence. Unfortunately, few communities in our state have such classes. Where they do exist, there are not enough of them, so that they can care only for the scholars with serious mental retardation rather than for the borderline cases we are considering. These children have to stay in the regular classroom. They soon become failures in the eyes of teachers, parents and companions and, too frequently, of themselves because they receive poor grades and frequently fail at the end of the school year, for the standards of the class are beyond their abilities.

Even the special class may fail of its purpose. Attendance there may become a stigma in the eyes of others. Companions may call it the "dumb-bell class" or, at the adolescent level, the "bum's college". A wise school administration and teaching staff can minimize the effect. Too often, however, they fail to do so. The trouble is usually to be found in the teachers' own attitudes. They look down upon the dull children and see them as nuisances to be avoided rather than as individuals who are in need of help and of specialized instruction. It is little wonder that the backward child comes to feel himself to be an outsider and not a real part of the school situation.

*Article prepared by Gilbert J. Rich, Ph.D., M.D., Director, Roanoke Guidance Center, Roanoke, Virginia.

If the school authorities fail in their duty to the child of borderline intelligence, what may we expect of the parents and siblings? Usually the answer is that they, being ignorant of the psychology of individual differences, have even less understanding of the situation. They know nothing of intelligence levels or mental retardation. Indeed, the latter term would doubtless be a severe threat to a father or mother. The parent cannot see his child as being retarded. Thus, lack of knowledge is complicated by emotional factors, for the admission that a child is retarded is considered by the parent as a reflection upon himself. A wilful, lazy or disobedient child is a different matter. These are considered as characteristics of the boy's or girl's free will and so do not reflect upon father or mother. When the dull child goes to school and finds the work too difficult, he is marked on a standard set for those of normal ability and he soon brings home report cards which contain low grades. A little later, he fails of promotion. Since the parent lacks understanding of the mental retardation (or is unwilling to acknowledge it), the youngster is believed to be lazy. He is told that he is "not applying himself", compared unfavorably to siblings or to the neighbor's children, denied privileges normal for his age, and even punished severely.

Although report cards and promotions are important guides for parental approval and disapproval, they are not the only ones. A child of borderline intelligence does not learn readily around the home. His inability here is not usually recognized, and he is given blame and scoldings because of the things he cannot do. A bright brother or sister only adds to the load of discouragement; both by unhappy comparisons and by direct teasing. The situation is especially bad when the father or mother has an ambition for the youngster that is beyond his ability. We see parents of dull children who are determined that the boy shall go through high school or even college and who use every means possible in their attempt to force this impossible feat.

The difficulties apparent in school and family life also make their appearances in other social relationships. Many of the games of childhood are competitive in nature, and they often involve thought and insight as well as strength and quickness of movement. Here, again, is a competition in which the borderline defective is the loser. In the earlier years, he is merely laughed at. That is bad enough, but worse is to come. Soon there is a change from individual to group games, in which teams compete. Now, no one wants the perpetual loser on his side. The discouraged child becomes an outcast. He cannot make or retain friends. Tricks are played upon him. His companions spurn him, chase him home, or run away from him. He is left to use what weapons are at hand in his fight for a place in life.

It is in this tendency to fight for a life which contains the normal satisfactions that gives rise to the manifestations of difficult behavior which are seen in retarded children. They want approbation, security, love, status, companionship, praise, and freedom from punishments just as much as they would if they were endowed with more adequate intellectual ability. But the whole world seems to be against them and to be denying their insistent needs. Nor can they reason out logical forms of compensation, for logical reasoning is a tool that is, in the main, lacking. Instead, we see a blind striking out against the noxious environmental forces in an effort to find some satisfactions. The forms of this fight are varied. Sometimes it is expressed as rebellion. This is usually directed, first of all, against the parents. Later, it spreads to all authority that serves as parental substitutes. Teachers, like parents, make the child feel inadequate and rejected, and are thus to be rebelled against. Still later, society as a whole takes up this role, and rebellion is now directed against the whole social code in such anti-social activities as stealing, fire-setting, sex misconduct, truancy, and the like.

Each individual of borderline intelligence tries in his own way to fight the forces that are against him. Not all rebel. Some use extravagant behavior to gain their ends. One may find that at home crying, whining, or fighting brings an attention that otherwise is withheld. Another finds his place in the sun by disturbing the classroom, especially when they are talking about something that he cannot understand. Or, failing to make or keep friends, he may steal money so as to buy candy for use as bribes to friendship. Another common situation is that of the boy (or girl) who is an outcast among well-behaved children, but who finds himself readily accepted in a delinquent group if he will join in all their activity. He does so promptly, not merely because he is suggestible, but mainly because he is

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so in need of being accepted by somebody. Unfortunately, his dullness often leads to his being apprehended by the law while the others escape. Similarly, the adolescent girl finds herself lacking the ability to attract boys as friends, for she is a poor conversationalist, lacks social graces, and has no abilities that would make her popular. But her need is as great as that of her brighter sister. Her sex is the only means she has of accomplishing her desires, and the resulting delinquency is easy to understand. So long as the social situation is such that the borderline defective is again and again made to feel inferior, rejected and inadequate, just so long will he make use of abnormal and anti-social means of compensation.

Attempts to meet the basic needs of these children, and thus to avoid some of the difficult situations and abnormal forms of compensation which we have enumerated, encounter numerous obstacles. The essential fact is that the various agencies in the community, be they educational, social or religious, are planned for persons of average intelligence. The state is supposed to take care of the feebleminded, and all others are considered to be normal. But the borderline defective is not feebleminded and cannot be cared for by the state. Unfortunately, he is not normal, and, therefore, cannot adjust to the institutions that society has set up for its collective benefit.

The situation is even more difficult when we turn to organizations in the social field. One of the difficulties that our patients face is that of making themselves acceptable to their companions. It is here that we should normally look to the group-work agencies for help. We should like to have the children introduced into controlled and supervised groups, taught how to get along with others in the wholesome way, and given a feeling that they belong and are appreciated. But the same trouble appears. The groups are geared to normal intelligence. Take, for example, the Boy Scouts and Girl Scouts, two excellent organizations that are doing fine work with bright children. Their programs, however, are highly competitive in nature. The system of grades and awards as the result of passing various tests is stimulating to the boy or girl who succeeds. But how about the one whose intelligence is not sufficient to make success possible? He fails to advance in grade and soon becomes discouraged. I am not saying this in criticism of the Scouts but merely to show how a well-developed organization may not meet the needs of the borderline defective. Other examples can easily be found. Recreational groups tend to be organized about activities in which something more or less concrete is accomplished, and ability to engage constructively in the particular activity is made the measure of acceptance in the group. Wherever this happens, the duller children are at so great a disadvantage that the agency cannot be used as an aid to their development. It would be harmful rather than helpful to place them in situations which would eventually lead only to further failure and further discouragement.

We have, as a society, provided for many types of deviates and dependents. We have large institutions for mental defectives and also for delinquent or dependent children of normal intelligence. We likewise have schools geared to the needs of normal children, or with special classes for those markedly deficient. Recreational agencies are similarly for those who are at least of average brightness. But dull children fit into none of them. Their adaptability is poor, yet they are expected to adapt to situations unsuited to them.

This, of course, is the essence of the matter, and the challenge that the borderline defective presents to the physicians, psychologist, social worker, group leader and teacher who deals with him. He is emotionally not really different from the person of better intelligence. But the normal outlets for the satisfaction of his needs are closed because of his disability. The special outlets provided for the feebleminded are not available. They are not suited to him, and do not exist in sufficient quantity. He is truly a forgotten and neglected individual. Often he is unhappy and maladjusted. Often, too, he creates a problem for school, neighborhood and law-enforcing agencies. The challenge can be met only when the needs of the borderline defective are recognized as such and when he is treated as a person who is worthy of attention.

The task of the doctor who sees such a child is educational in nature. He must educate the parents, the school and the community to see and to accept the dullness as a pathological condition that requires understanding and help rather than as a disgrace to be hidden or a willful wickedness to be treated with

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derision, teasing, shaming and punishment. Parents have to be helped to accept their dull children as such, neither forcing them beyond their abilities nor being ashamed of their backwardness. They must learn that poor grades and occasional failures in promotion are to be expected and that their job is to ease the pathway of the backward child rather than to make it more difficult. Home, after all, is the primary source of a child's emotional security. Unless he receives acceptance and satisfaction in a normal manner there, he will seek it by abnormal behavior somewhere else. Here, as in other conditions, an ounce of prevention is worth a pound of cure. The doctor is in a strategic position to apply that ounce of prevention in the advice that he gives to the parents.

New Drug Effective in Treating Toxemia of Pregnancy.

Protoveratrine, a relatively new drug, is a valuable adjunct to the obstetrician's armamentarium in the management of toxemia of pregnancy, in the opinion of Dr. Edward Meilman, Boston, (Oct. 10 J.A.M.A.). Toxemia of pregnancy, a series of pathological conditions occurring in pregnant women, is characterized by rapid weight gain, accumulation of fluid, disturbances of vision, high blood pressure, headache, excessive albumin in the urine, and convulsions.

Although use of protoveratrine is not intended to replace certain fundamentals of treatment in toxemia such as bed rest and sodium restriction, it offers prompt control of the symptoms, according to Dr. Meilman.

He reported on the use of protoveratrine in 17 pregnant women suffering from various forms of toxemia of pregnancy. In all cases, prompt relief was obtained following use of the drug.

The primary disturbance responsible for toxemia of pregnancy remains unknown, Dr. Meilman pointed out. In many instances, toxemia develops so early in pregnancy that the chances of fetal survival with immediate delivery are small; if the fetus remains undelivered, intrauterine death often occurs. By the judicious use of protoveratrine such patients, in some instances, may be carried for several weeks, until reasonable maturity of the fetus is reached, before instituting necessary obstetric measures, thus improving the chances of fetal survival, he added.

According to the author, the number of cases he described is too few for final determination of the value of the drug, but he said he believed the preliminary tests indicated its effectiveness.

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PUBLIC HEALTH

MACK I. SHANHOLTZ, M.D.
State Health Commissioner of Virginia

Tularemia

Though the opening of the hunting season has been delayed this year because of the excessive dryness of the woods due to lack of rainfall, it is timely to recall that infections with Pasteurella tularensis (Bacterium tularense) are more common at this season. This disease was first discovered in a naturally infected wild animal and soon thereafter was recognized as a disease of man. In the United States it occurs in every month of the year, but especially during the rabbit hunting season.

Tularemia is a disease of which the bacterial origin, seasonal incidence, geographic distribution and zoologic distribution, have been thoroughly studied. The source of infection may be through wild rabbits and hares, deer fly (Chrysops discalis), tick (Dermacentor andersoni and Dermacentor variabilis), woodchuck, coyote, muskrat, opossum, tree squirrel, ground squirrel, quail, skunk, cat, dog, fox, hog, deer, sage hen and bull snake. In Virginia the chief offenders in transmitting the disease to man are the wild rabbits and hares. Man becomes infected through handling and skinning these animals. Infection may occur through the ingestion of insufficiently cooked rabbit meat. Refrigerated rabbits kept constantly frozen at 5° F. may remain infective for 3½ years. Drinking contaminated water has been said to cause the disease. Laboratory infections are not infrequent.

The infectious agent of tularemia may be found in the blood of man during the first two weeks of the disease and in the lesions up to a month from onset and sometimes longer. The disease is not communicable from man to man by mere contact. All ages are susceptible. The incubation period may vary from 1 to 10 days, usually not over 5 days, and averages about 3 days. The onset is sudden, with headache, vomiting, chills, aching, weakness and fever. Fever is always present; there is an initial rise, a remission and a secondary rise. There is a moderate leucocytosis. A skin eruption may occur. There is usually a primary ulcer at the site of infection with resulting bubo of the lymph nodes which drain the site. Prostration is marked and weakness on exertion may persist for months. The active state of the disease lasts from 2 to 3 weeks. Convalescence is slow and during the third month the patient may be able to be at work only part-time. Permanent immunity follows recovery from an attack.

The agglutination test is most reliable and is a valuable aid in confirming the diagnosis. Serum from the blood taken during the second week will show agglutination of P. tularensis in rising titer. Rest in bed is highly important and the patient cooperates well on account of weakness.

Streptomycin is the drug of choice for treatment. One gram per day in divided doses every 3 hours day and night, for 5 days, given intramuscularly, is the usual dose; some patients may need less and a few may need more.

Preventive measures in the control of tularemia are:

1. Avoidance of the bites of, or handling of, flies and ticks when working in infected zones during the seasonal incidence of blood sucking flies and ticks.

2. The use of rubber gloves by persons engaged in dressing wild rabbits and hares. Thorough cooking of the meat before eating is necessary.

3. Avoidance of raw drinking water in areas where the disease prevails among wild animals.

Human cases of tularemia should be reported to the local health department and investigation of the source of infection should be undertaken in each case.

MONTHLY REPORT OF THE BUREAU OF COMMUNICABLE DISEASE

	Oct. 1953	Oct. 1952	Jan.-Oct. 1953	Jan.-Oct. 1952
Brucellosis	4	1	52	34
Diphtheria	9	40	72	113
Hepatitis	213	66	2059	618
Measles	60	44	4665	15579
Meningitis (Meningococcic)	11	13	166	165
Poliomyelitis	88	107	682	623
Rocky Mt. Spotted Fever	3	1	59	75
Scarlet Fever	45	36	703	595
Tularemia	2	0	25	42
Typhoid & Paratyphoid	8	10	70	81
Animal Rabies	33	30	381	402

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

President ..... MRS. K. W. HOWARD, Portsmouth
President-Elect ..... MRS. MAYNARD EMLAW, Richmond
Recording Secretary ..... MRS. LEE S. LIGGAN, Irvington
Corresponding Secretary—
MRS. LEMUEL E. MAYO, Portsmouth
Treasurer ..... MRS. WILLIAM C. BARR, Richmond
Publication Chairman MRS. WM. S. GRIZZARD, Petersburg

Arlington Auxiliary.

The annual membership tea given by the Woman's Auxiliary to the Arlington County Medical Society for new members was held at the home of the President, Mrs. Lee B. Martin on October 13th, 1953.

A large number of the members attended, together with their guests, prospective new members. A very pleasant social afternoon get-together followed.

Warwick-Newport News Auxiliary.

Mrs. Barnes Gillespie, president, has named the following committee chairmen for 1953-1954:

Mrs. Paul Hogg is chairman of the program committee; Mrs. Frederick Nimrod Thompson, Doctor's Day; Mrs. Ward Anderson, Jr., Mrs. William T. Watkins, Jr., membership; Mrs. Waverly R. Payne, cancer; Mrs. Guy C. Amory, publications; Mrs. Louis J. Richman, publicity; Mrs. Vincent Lascara, rolling library; Mrs. W. J. Baggs, bulletin; Mrs. J. W. Carney, civil defense; Mrs. Murray Dick, today's health; Mrs. Melvin L. Horne, legislative; Mrs. G. S. Hankins, public relations; Mrs. Thomas N. Hunnicutt, Jr., nurse recruitment and Jones award; Mrs. F. S. Beazlie, Jr., American Medical Education Foundation; Mrs. Alvin Mirmelstein, mental health; Mrs. O. W. Booth, Jane Todd Crawford, Mrs. W. A. Read, hospitality.

The committee chairmen were announced at a luncheon meeting of the auxiliary held at the home of Mrs. Thomas C. Lawford on River Road, Hilton Village, and plans were made at this time for the annual bazaar, which was to be held November 11 in Mary Immaculate Hospital. The next meeting will be held November 18 at the home of Mrs. John F. Gayle.

Mrs. J. W. Carney gave a report on the State convention of the Woman's Auxiliary to The Medical Society of Virginia, which was held in Roanoke.

Officers of the Woman's Auxiliary to the Warwick-Newport News Medical Society to serve with Mrs. Gillespie are Mrs. William Goldsmith, vice president; Mrs. Quentin J. Legg, secretary; Mrs. F. A. Carmines, treasurer; Mrs. Thomas C. Lawford, historian; Mrs. T. W. Caldroney, corresponding secretary.

Dallas to Be Scene of Rural Health Conference.

Calling for all-out community "teamwork," the ninth National Conference on Rural Health will stress the importance of individual participation in community affairs at the March 4-6 sessions in the Baker Hotel, Dallas. Sponsored by the AMA's Council on Rural Health, the Conference theme will be: "Let's Put More 'U' In CommUNITY."

Leaders in the fields of medicine, agriculture, education and public health will attend the formal sessions which begin at 2 p.m. on Thursday, March 4, and continue through Saturday, March 6, winding up with a luncheon meeting at 1 p.m. Problems of nutrition and costs of medical and hospital care and methods of prepayment are the principal subjects to be discussed by outstanding rural health leaders.

In addition, a pre-conference session "for doctors only" will be held Thursday morning. Problems confronting physician-members of state rural health committees will be discussed, such as: (1) physician participation at the grass roots, and (2) health insurance matters.

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Pain Killers

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PROCEEDINGS

THE MEDICAL SOCIETY OF VIRGINIA
1953 ANNUAL MEETING
Roanoke
October 18, 19, 20 and 21, 1953

COUNCIL
Sunday, October 18, 1953

A special meeting of Council was held on Sunday morning, October 18, at the Hotel Roanoke. The meeting was called for the expressed purpose of considering the budget for the fiscal year 1953-54, as recommended by the Finance Committee. (Detailed budget included in minutes of the first session of the House of Delegates.)

The regular meeting of the Council was called to order at 2:30 p.m. on Sunday, October 18, 1953, at the Hotel Roanoke, after which the roll was called. Those present were Dr. James L. Hamner, President, Dr. Vincent W. Archer, Dr. John T. T. Hundley, Dr. Lewis H. Bosher, Dr. Mack I. Shanholtz, Dr. A. A. Creecy, Dr. Walter P. Adams, Dr. Guy W. Horsley, Dr. Wilkins J. Ozlin, Dr. Louis P. Bailey, Dr. Frank A. Farmer, Dr. Harold W. Miller, Dr. Claude A. Nunnally, Dr. James P. King, and Dr. James W. Love.

Dr. John B. Todd, President, Virginia State Dental Association, was introduced and expressed his regrets in not being able to be present at the meeting of the House of Delegates, but wished the meeting success.

It was reported that an effort has been made to interest the National Park Service in the birthplace of Dr. Walter Reed. Considerable historical data has been furnished the Regional Director of the Service, but no word as to possible action has been received. Prospects are not too optimistic. It was moved that Dr. Creecy, Councilor for the First Congressional District, be authorized to contact the Representative of that District regarding disposition of the matter. The motion passed.

A resolution of the Arlington County Medical Society concerning press releases by its members was next considered. The resolution, which would make it necessary for Arlington Society members to refer such releases to the society's Public Relations Committee for prior approval, had been previously studied by the Ethics Committee of The Medical Society of Virginia and found to contain nothing unethical. However, it was the consensus that the wording of the resolution should be carefully weighed before outright approval was recommended. It was then moved and passed that the action of the Ethics Committee be accepted. A second motion was passed which would refer the resolution to the appropriate committee of the A.M.A. for advice regarding the wording.

Letters from Mr. R. E. Miller, Valdosta, Georgia, concerning the death of his son, the late Dr. Grantland S. Miller, Richlands, were then brought to the attention of Council. It was pointed out that Mr. Miller believed there were certain irregularities connected with his son's death which warranted some action by the Society. Statements from witnesses were read, and it was the consensus that the matter was outside the realm of the Society, and no further action was recommended. It was then moved that a letter, to be approved by the attorney of the Society, be directed to Mr. Miller explaining the Society's position.

Next considered was a resolution approving "The Study of Tuberculosis in Virginia—1952". The pressing need for additional beds was mentioned, and it was brought out that in all probability, the General Assembly will consider certain other needs first, despite the seriousness of the problem. The most urgent communicable disease problem at the moment is an appropriation for 200 additional beds for Negroes, and it was moved that the resolution be amended to include such a recommendation. The motion passed unanimously, and the resolution approved accordingly.

The advisability of the Society forming its own insurance company in view of the increasing rates for professional liability insurance was discussed. It was pointed out that the various commercial companies were having a difficult time breaking even, and it was therefore doubtful if the Society could be successful in such a venture. It was learned that the A.M.A. was studying the problem in detail, and a motion was made that the matter be referred to the appropriate A.M.A. committee for study and recommendation. The motion passed.

Council was next informed of plans for a reception honoring Dr. Walter B. Martin, President-Elect of the A.M.A. The reception will be held in the Ivory Room of the Hotel Jefferson in St. Louis during the A.M.A.'s Interim Session. Those to be invited will include Members of the A.M.A. House of Delegates, Officers of the A.M.A. and its various Councils, and their wives. Cost of the reception was included in the budget.

The matter of honoring past presidents of The Medical Society of Virginia was discussed, and it was agreed that some concrete means should be found to show the Society's appreciation of their efforts. Several suggestions were offered, and it was decided that the Executive Committee should consider and decide on an appropriate certificate.

Mention was made of the fact that some state societies charge a registration fee for non-members during annual meetings. After considerable discussion, it was decided to take no action.

Dr. Archer then reported to Council on a health inventory about to get underway in Orange County. The survey is sponsored by the Virginia Council on Health and Medical Care, which has requested that the Society approve the venture. The survey will determine the health

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needs and services of an average Virginia county. It was reported that the Governor has been interested to the point where $2,000 to aid in the survey will be made available from his contingent fund. A motion to approve the survey was passed unanimously.

The Annual PR Conference of the Society, to be held in Richmond on November 24, was brought to the attention of Council, with the recommendation that every effort be made to attend.

Next considered was a resolution by the Alexandria Medical Society suggesting that the Society urge the General Assembly and the Division of Motor Vehicles to arrange for the letters "M.D." to be on the auto license plates of physicians. After considerable discussion, it was moved and passed that the resolution be tabled.

Dr. Horsley suggested that the names of delegates and alternates be printed in future programs of the annual meetings, along with the complete listing of officers.

The necessity of hiring a court reporter to record detailed minutes of the House of Delegates meetings was questioned, and it was suggested that the matter be considered at the next meeting of Council.

There being no further business, the meeting was adjourned.

HOUSE OF DELEGATES
FIRST SESSION
October 18, 1953

The House of Delegates of The Medical Society of Virginia met in the Ballroom of the Hotel Roanoke on October 18, and was called to order at 8:00 p.m. by Dr. James L. Hamner, President.

Dr. Hamner then offered the following report on his term of office: "Members of the House, distinguished guests, I have no speech to make to you, nor do I have any special things to say except that I did want to express a few words in the way of appreciation for your cooperation during this last year. To be elected President of the Medical Society of Virginia is a distinct honor which comes to only a few; for this manifestation of your confidence I am indeed grateful.

"A detailed report of the year's work would be time consuming and dull. I do want to thank each Member of the Society for the fine cooperation and support which has been given me. It has been a real pleasure and a real privilege to serve; although a great honor it has carried with it much responsibility. It is not for me to say that these responsibilities have been well met, but I do know that any degree of success which has been attained has come because of the help and the cooperation of all the people with whom I have been privileged to serve.

"I wish to pay tribute to, and extend my sincere thanks to all those who worked in the home office, and the Officers of the Society, Members of Council, Chairmen and Members of the many Committees. I would like to digress a minute to say that the Committees have done a wonderfully fine job; they have worked willingly, and it has been a real inspiration to see them take hold and do the jobs which have been assigned them.

"The Society has become large. It is necessary that most of the work be done by Committees. Without the fine cooperation of these fine and many Committee members, I know we could not have done what we have been able to do.

"I do want to pay tribute to the Woman's Auxiliary and all of the Members of the Society for being ever willing and ready to serve in every way possible. This has certainly been a great help for which I am gratefully indebted to each Member of the Society. If I may be privileged to ask you further service, it will be that you continue to support Bob Howard and all the fine and kind people in the home office, and give the same type of support to my good friend and distinguished successor Vincent Archer, which you have given me during the past year. I want to thank you for everything and assure you I appreciate it most thoroughly in every way that you have helped me to try to be as fair, or to attain a fair degree of success during this year."

Dr. Hamner then introduced Dr. John T. T. Hundley, Speaker of the House, who called for a report from Dr. Frank Farmer, Chairman of the Credentials Committee. Dr. Farmer reported a quorum was present.

Minutes of the 1952 meeting of the House of Delegates were then approved and passed without discussion.

The speaker then recognized Dr. Walter A. Porter, member of the Finance Committee, who presented the proposed budget for 1953-54 as recommended by Council. The total budget of $70,665.00 was adopted and is listed below.

Budget

EXECUTIVE OFFICE	1953-4
Salaries	$25,030.00
Telephone	1,500.00
Postage	750.00
Stationery & Supplies	750.00
Office Equipment	500.00
Building Maintenance	2,500.00
Building Repair	500.00
State Convention Contingency	500.00
Council Expenses	325.00
Executive Assistant to A.M.A.	400.00
Delegates to A.M.A.	2,000.00
President's Expense	1,000.00
Travel Expense	2,000.00
Virginia Medical Monthly	18,000.00
Scientific Exhibits	2,500.00
Post-Graduate Medical Education Committee	1,000.00
Legislative Committee	1,500.00
Walter Reed Commission	250.00
Cancer Control	400.00
Miscellaneous Health Service Committees	450.00
National Emergency Medical Service	150.00
Woman's Auxiliary	100.00
Affiliated Agencies Dues	85.00
SPECIAL APPROPRIATIONS	
Va. Council on Health and Medical Care	2,000.00
National Society for Medical Research	150.00
Social Security Taxes	375.00
Miscellaneous	500.00

A.M.A. Reception	1,000.00
Secretarial Help for Joint Meeting	1,800.00
PUBLIC RELATIONS	
Conference	750.00
Radio and Press	400.00
Literature and Bulletins	1,250.00
Exhibits	250.00
TOTAL	$70,665.00

The afternoon meeting of Council was reported by Mr. Howard, Executive Secretary, and those items referred to the House of Delegates for action were read.

The first item was the following resolution by the Arlington County Medical Society concerning public statements by physicians, with reference to their practice or profession. The resolution had been studied by the Ethics Committee, which found nothing unethical. Council, in accepting the report of the Committee, believed that the resolution should be referred to the A.M.A. Committee on Press Relations for further study and possible recommendation as to rewording.

WHEREAS, advertising in any form is considered to be contrary to the established ethics of the medical profession, and

WHEREAS, possible violations to this code of ethics have occurred in this metropolitan area;

THEREFORE, BE IT RESOLVED that the individual members and/or any group of members of the Arlington County Medical Society who wish to release any information concerning the practice of his or their profession to any news disseminating organization or representative thereof must first make application and have it approved by the Public Relations Committee of the Arlington County Medical Society. Failure to comply with this regulation will make that individual or group of individuals subject to the action of the Board of Censors of said society. The Board of Censors upon application of any member of the society shall examine all unapproved news releases and report same to the Arlington County Medical Society at its next regularly scheduled meeting after such application is made and shall recommend to the society suitable action.

The second item was the following RESOLUTION ON "THE STUDY OF TUBERCULOSIS IN VIRGINIA—1952", which was recommended for approval:

WHEREAS, The Study of Tuberculosis in Virginia—1952, recently conducted by the Virginia State Department of Health and the Virginia Tuberculosis Association, states:

1. Tuberculosis is Virginia's most important communicable disease problem.
2. *Now* is the time for an all-out effort to eliminate the disease in Virginia; and

WHEREAS, The Study of Tuberculosis in Virginia—1952 presents convincing evidence to support the above statements and has been conducted by a thoroughly competent technical staff, and

WHEREAS, The day to day experience of practicing physicians in Virginia offers additional convincing evidence for the critical nature of tuberculosis control problems in Virginia; and

WHEREAS, The family physician and internist, more than ever before, will be the keystone in the Commonwealth's tuberculosis control program; and

WHEREAS, The Medical Society of Virginia, in convention assembled, has the responsibility of giving leadership to the medical profession and to citizens of the Commonwealth in general;

BE IT RESOLVED: THAT (A) The Medical Society of Virginia accept the "Study of Tuberculosis in Virginia—1952" as a reasonable and fair appraisal of the tuberculosis situation in the Commonwealth.

THAT (B) The Medical Society of Virginia endorse the recommendations made therein as worthwhile suggestions to which serious consideration should be given by those charged with formulation of a tuberculosis control program for the State.

THAT (C) The Medical Society of Virginia specifically approves (1) the construction of additional beds, with particular reference to an appropriation by the General Assembly at its next meeting for money for construction of 200 additional beds for Negroes to meet an obvious and most urgent communicable disease problem, (2) the recommendation for establishment of Regional Chest Clinics at strategic locations throughout the State.

THAT (D) A copy of this resolution, with appropriate covering letters, be sent to Governor John S. Battle, and to aspirants for the office of Governor or for a seat in the General Assembly.

THAT (E) Individual members of The Medical Society of Virginia do their utmost to acquaint individuals and groups in their own communities with tuberculosis control needs in the Commonwealth, urging these individuals and groups to demand effective corrective action by their elected officials, or promises of such action by aspirants for public office.

Council also recommended the endorsement of a Health Inventory Education Survey soon to begin in Orange County.

The fourth item considered was the following resolution of the Alexandria Medical Society. Council recommended that no action be taken.

The Alexandria Medical Society wishes to suggest to the Medical Society of Virginia that it recommend to the General Assembly and the Commissioner of Motor Vehicles that physicians and surgeons of this state be privileged to bear stamped on their motor vehicle license plates the letters "M.D."

A precedent has been set in this state in that amateur radio operators have their call letters on their license plates in lieu of the customary plates.

The above has been permitted in recognition of the part these men may play in emergency or disaster. The role of physicians and surgeons in every day emergencies as well as possible disasters is well known and should be given the same consideration as others.

It was then moved and passed that the report of Council be adopted.

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Dr. Hundley introduced Dr. Walter B. Martin, President-Elect of the American Medical Association, who spoke briefly to the House on matters currently under study by the A.M.A.

Mrs. Thomas N. Hunnicutt, President, and Mrs. K. W. Howard, President-Elect of the Woman's Auxiliary to The Medical Society of Virginia, were then introduced.

Delegates to special meetings were then recognized: Dr. Wilkins J. Ozlin, delegate to the Medical Society of the State of North Carolina, Dr. Linwood Ball and Dr. Harvey Haag, delegates to the Virginia Pharmaceutical Association, Dr. Charles L. Outland, delegate to the National Conference on Physicians and Schools, and Dr. John O. Boyd, Jr., delegate to the Conference on Federal Medical Services.

Dr. Hundley introduced the following visiting delegates to the annual meeting: Mr. C. E. Webber and Mr. Charles E. Green, Jr., of the Virginia Pharmaceutical Association, and Miss Hazel Knibb, of the Graduate Nurses Association of Virginia.

A recess was then taken for the purpose of allowing the delegates of the various districts to select members of the Nominating Committee. The members of the Committee were Dr. W. A. Read, First District; Dr. George A. Duncan, Second District; Dr. Charles L. Outland, Third District; Dr. L. H. Bracey, Fourth District; Dr. J. D. Hagood, Fifth District; Dr. John E. Gardner, Sixth District; Dr. Guy W. Fisher, Seventh District; Dr. D. W. Scott, Eighth District; Dr. Rufus Brittain, Ninth District; and Dr. Ben C. Jones, Tenth District. A meeting time was announced, and business resumed.

Consideration was next given three committee reports published in the Virginia Medical Monthly and any supplemental reports ready for presentation.

An amendment to the report of the Virginia Committee of the American Medical Education Foundation was moved and passed which would have each component society appoint a committee to canvass its membership for individual contributions.

The reports were then refered to the Reference Committee.

Dr. Hundley then called for new business, and the resolutions introduced by the following delegates were referred to the Reference Committee.*

Dr. Walter B. Martin and Dr. John O. Boyd, Jr.,—resolution by which Society endorses the A.M.A. resolution of June 1953 relative to veterans' medical care. Pledges support of the A.M.A. program.

Dr. William L. Powell—resolution recommending that the State Legislature augment the present inadequate federal aid for proposed urgently needed hospitals.

Dr. W. H. Whitmore—resolution requesting insurance companies to change policies so that fees for examination of out-patients be paid not only to hospital departments but to duly qualified physicians doing examinations outside of hospitals.

Dr. Whitmore—resolution to approve the principle that exploitation of any physician by any group, etc., for financial profit is wrong and unethical. Also stated that exploitation of any hospital or any patient by any physician is wrong and unethical.

Dr. H. C. Bates—resolution to approve educational program of the A.A.P.S.

Dr. L. H. Bracey—resolution that the Society contribute to the American Medical Education Foundation.

Dr. H. J. Langston—resolution by which a committee would study the advisability of birth control clinics, the matter of pregnancies in children, pregnancies in women who have more children than they can support, and the advisability of sterilization of both male and female seeking the service voluntarily.

Dr. Russell V. Buxton—resolution by which the Society would assist the State Board of Nurse Examiners in obtaining 50 additional scholarships for student nurses through State Legislature.

Dr. O. W. Ward—resolution by which qualified nurses would be permitted to start intravenous infusions on doctor's orders.

The matter of reserving a bloc of rooms in the headquarters hotel for officers, guests, and Members of the House of Delegates was brought up, and it was moved and seconded that no rooms be set aside especially for Members of the House. The motion was lost.

There being no further business, the meeting was declared adjourned until Tuesday, October 20, at 4:00 p.m.

*Text of resolutions included in minutes of 2nd Session, House of Delegates.

SECOND SESSION

October 20, 1953

The second session of the House of Delegates of The Medical Society of Virginia was called to order by Dr. James L. Hamner, President, at 4:00 p.m., Tuesday, October 20, in the Pine Room of the Hotel Roanoke.

Dr. Hamner turned the meeting over to the Speaker, Dr. John T. T. Hundley, who requested a report from Dr. Frank Farmer, Chairman of the Credentials Committee. It was established that a quorum was present.

The report of the Reference Committee was considered first. The Committee recommended the acceptance and adoption of the report of the Executive Secretary-Treasurer, and the report of the Delegates to the A.M.A.

The following resolution was then adopted upon the recommendation of the Reference Committee:

Recommended that The Medical Society of Virginia assist the State Board of Nurse Examiners in obtaining fifty additional scholarships for student nurses through the State Legislature, provided that the students agree to serve in needed communities for a specified length of time, or reimburse the State.

The following resolution was then read and passed after some discussion:

WHEREAS, the Virginia Society of Ophthalmology and Otolaryngology has approved and endorsed and recommended for passage by the General Assembly of Virginia a bill to regulate the practice of Opticianry, copy of which is hereto attached, and

WHEREAS, the said Society has indicated its desire that

The Medical Society of Virginia take similar action on said bill, now

THEREFORE, BE IT RESOLVED, that The Medical Society of Virginia does hereby endorse, approve and recommend for passage by the General Assembly of Virginia the attached bill to regulate and license the practice of Opticianry, subject to such amendments as may appear appropriate.

It was then recommended that the reports of the Ethics, Judicial, Finance, and Membership Committees be approved.

The following resolution from the Committee on Post-Graduate Education was then approved:

Move that the Virginia Division of the American Cancer Society be thanked for their assistance and support of the program for post-graduate cancer education,

That similar expressions of appreciation be extended to the Extension Division of the University of Virginia for arranging the itinerary and scheduling the courses, and

That the money collected from the physicians who participated be returned to the Virginia Division of the American Cancer Society for the furtherance of post-graduate education in cancer, and

That appropriate letters of appreciation be sent to the Virginia Division of the American Cancer Society, the Extension Division of the University of Virginia, and to Dr. R. R. Spencer, who gave the courses.

Approval was recommended for the reports of the Grievance and Public Relations Committees.

The following three items in the supplemental report of the Committee on Medical Service were read in order that proper emphasis could be given them, after which the report was adopted:

Recommended that each component society appoint a special committee on Federal Medical Services to handle all affairs concerned in this field,

That a special committee on Federal Medical Services of The Medical Society of Virginia be appointed to serve for such period of time as this program occupies the interest of the A.M.A. and of The Medical Society of Virginia, and

That the Medical Service Committee be instructed to continue its efforts to arrive at an acceptable state-wide fee schedule and to perfect plans relative to its use in the event that such a schedule is effected.

Upon the recommendation of the Reference Committee, the following resolution was adopted:

WHEREAS, the number of veterans is constantly increasing, and

WHEREAS, the medical care program for these veterans will result in ever increasing expansion of federal medical programs, and

WHEREAS, such expansion of federal medical programs present a serious threat to medical progress which our country has enjoyed under our free enterprise system since its foundation,

THEREFORE, BE IT RESOLVED, that The Medical Society of Virginia at its 1953 meeting does unreservedly endorse the resolution adopted by the A.M.A. in June 1953 relative to Veterans Medical Care, and pledges its support of the program being undertaken by the A.M.A. to attain this end.

The following resolution was then read with the recommendation that it be referred to the Maternal Health Committee for study and a subsequent report to the House. The recommendation was approved.

That the President of The Medical Society of Virginia appoint a committee to study the following propositions:

1. Birth control clinics, both private and public, conducted by physicians.
2. Pregnancies in children, who in many instances should not be allowed to go to term.
3. Pregnancies in women who already have more children than they can now feed and cloth.
4. Sterilization of both male and female who seek this service voluntarily.

With regard to the report of the Committee on Venereal Disease, it was recommended that the Committee work with the State Health Department, the Clinical Pathological Society, and the heads of appropriate departments of the two medical schools to determine the feasibility, decide on the merit, and determine further steps for utilization of the specific test for syphilis (T.P.I.). This action was approved.

The following two resolutions were then read with the committee's recommendation that the sum of $2,000 be contributed to the Foundation and that every effort be made to obtain individual contributions over the state:

RESOLVED that The Medical Society of Virginia request that each local county medical society appoint a committee for the purpose of canvassing the entire membership to obtain as large as possible contribution for the purpose of medical education.

RESOLVED that The Medical Society of Virginia make a contribution to the American Medical Education Foundation.

A supplemental report of the Liaison Committee to the U.M.W. Welfare and Retirement Fund, which follows, was read and adopted.

The Liaison Committee to meet with the U.M.W. Welfare and Retirement Fund and the appropriate A.M.A. agencies met in Charleston, West Virginia, on September 12-13. Present were Dr. James L. Hamner, Dr. John O. Boyd, Dr. Mack I. Shanholtz, Dr. James P. Williams, Dr. Rufus Brittain, Dr. Mary Elizabeth Johnston, Dr. John T. T. Hundley, and Robert I. Howard.

In recognition of the real need for improved medical services in the coal mining areas, and in appreciation of the desire of the U.M.W. Welfare and Retirement Fund officials, the Liaison Committee of The Medical Society of Virginia recommends to the House of Delegates as follows:

1. That every effort be made to extend post-graduate education to the practicing physicians of the mine areas.
2. That strenuous efforts be made to encourage physicians to locate in those areas for practice.
3. That, in cooperation with other interested agencies, efforts be made to improve available hospital facilities.
4. That The Medical Society of Virginia extend its advice and assistance to mining communities in the establishment of community health centers to serve the health needs of the local communities.
5. That organized medicine in Virginia cooperate with the U.M.W. Welfare and Retirement Fund to set up practical working standards for community participation in the operation of the new Memorial Hospitals, in accordance with and within the framework of approved practices as set up by official accrediting agencies.
6. That The Medical Society of Virginia make every effort to correct the causes leading to and the suspicion and distrust which exist between the U.M.W.A. and the medical profession in the mining areas, in full recognition of the mutual objective of better health and medical care for the mining population.

The following portion of the report of the Committee to Assist the American Diabetes Association was emphasized and approved:

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The Society of general practitioners in Richmond have agreed to examine, free of charge, the urine of any person which is brought to the doctor's office during the week of the drive in November. The Richmond Academy of Medicine has agreed to this also. This committee suggests that The Medical Society of Virginia, as a whole, make such an offer to the public and requests that the delegates approve this at the October meeting.

Upon the recommendation of the Reference Committee, the following resolution was referred to the Committee to Confer with the State Board of Nurse Examiners, with the request that a report be made to Council at its next session.

Resolve that properly qualified nurses be permitted to start intravenous infusions on doctors' oral or written orders, and that to do so does not constitute the practice of medicine (as has apparently been held by judicial cases in the past 12 months).

The Speaker, as directed by the Reference Committee, urged the Delegates to make every effort to have component societies bring all eligible physicians into The Medical Society of Virginia and the American Medical Association. It was noted that few component societies are actually sending the State Office their membership rosters by July 15 of each year, as required in Article III, Section 9, of the By-Laws.

The following resolution was then read:

WHEREAS, the Association of American Physicians and Surgeons has for several years supplemented the efforts of the American Medical Association in its fight against socialized medicine by its close scrutiny of new legislation concerning socialized medicine and has placed such information before its members, and

WHEREAS, it is carrying on an annual campaign to educate the students in public and private high schools on the value of the private practice of medicine, and

WHEREAS, the Association of American Physicians and Surgeons has no intent to interfere with or supplant in any way the American Medical Association, and

WHEREAS, eighteen state medical societies have already seen fit to endorse the program of the Association of American Physicians and Surgeons,

BE IT HEREBY RESOLVED THAT The Medical Society of Virginia endorse and approve the program of the Association of American Physicians and Surgeons.

It was the recommendation of the Reference Committee that the Society approve the educational program of the A.A.P.S. provided their educational material has been cleared by the A.M.A. A motion to approve the action of the Committee was carried.

The following resolution was approved:

WHEREAS, certain insurance companies issue medical care policies which provide payment for electrocardiograms, laboratory examinations, and X-ray examinations for non-hospitalized out-patient cases, payable only to hospitals, and

WHEREAS, such provisions encourage and further the practice of medicine by hospitals, and

WHEREAS, such provisions do not allow the patient a free choice of physicians for such examinations, and

WHEREAS, such provisions in insurance policies result in unfair competition and discrimination against those physicians doing special examinations outside of hospitals,

BE IT RESOLVED THAT (a) The Medical Society of Virginia requests that the insurance companies concerned change their policies so that fees allowed for examination of out-patients be paid not only to hospital departments, but to duly qualified physicians doing such examinations outside of hospitals; and

(b) That in all cases, payments for such services be made directly to the physician making the examination; and

(c) That a copy of this resolution be sent to the following: (1) The Executive Secretary of the American Medical Association, (2) The Insurance Commission of Virginia, and (3) The Health Insurance Council.

Upon the recommendation of the Reference Committee, the next resolution was approved:

WHEREAS, certain hospitals employ physicians in several specialist classes to provide medical services for hospital patients and out-patients, and

WHEREAS, in some cases these physicians are employed on terms that result in a profit for the hospital over and above a fair return on investments in equipment and overhead costs for space, personnel and supplies, and

WHEREAS, such practices result in a part of the fees that the patient pays for specialist services going for other hospital purposes, a situation similar to fee splitting between individuals, and

WHEREAS, "The Principles of Medical Ethics of the American Medical Association", accepted by this society, include this provision, Article VI, Section 6—"A physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, under terms or conditions which permit exploitation of the services for the financial profit of the agency concerned." and

WHEREAS, it is for the best interest of the patient that the fees paid for professional services should be strictly for such professional services and not partly for hospital expense,

THEREFORE, BE IT RESOLVED (a) that The Medical Society of Virginia approves the principle that exploitation of any physician by any group, organization or individual, for financial profit is wrong and unethical;

(b) That, also, the exploitation of any hospital or any patient, by any physician is wrong and unethical;

(c) That all members of this society are urged to do their utmost to correct unethical situations in medical practice, both by their influence on organizations or individuals involved, and by their own personal example of ethical conduct.

Presented next was the following resolution pertaining to the need of additional State funds to augment inadequate Hill-Burton funds for hospital construction in Virginia:

To His Excellency, The Governor of Virginia—The Honorable John S. Battle

WHEREAS, the Virginia Hospital Advisory Council has approved the requests of nine hospitals situated in seven Virginia communities for Federal funds under the provision of the Hill-Burton Act, and

WHEREAS, the anticipated Federal funds allocated to hospitals in Virginia during the next three years will total only thirty-three (33) per cent of the estimated cost of these institutions, and

WHEREAS, the campaigns to raise funds for these institutions and the plans formulated in terms of the needs in each community were based on the assumption that fifty-five (55) per cent of the cost would be obtained from Federal and State sources as had been true in the past, and

WHEREAS, failure to obtain the full anticipated amount will seriously curtail or actually prevent the erection of these badly needed hospitals with resulting hazards to the health of citizens of this Commonwealth,

THEREFORE, BE IT RESOLVED THAT His Excellency, The Governor of Virginia, and State Legislators be respectfully requested and urged to recommend that the present

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inadequate Federal aid be augmented by funds from the Commonwealth of Virginia, as has been done in the past, at the next meeting of the Legislature to be held in January 1954, in order that the proposed urgently needed hospitals may be erected as originally planned at the earliest possible moment.

It was moved and passed that the resolution be adopted.

The Speaker next reported the recommendation of the Reference Committee concerning an A.M.A. request that Delegates to the A.M.A. be instructed as to the matter of extending to the osteopaths the facilities of consultation with members of the medical profession. The Committee had recommended that the Delegates to the A.M.A. go uninstructed and act as they see fit in view of circumstances, materials, and arguments presented. A motion to approve the action of the Reference Committee was passed.

This concluded the report of action by the Reference Committee. It was noted that committee reports had been voted on during the first session of the House of Delegates, and where no changes had occurred, it had not been considered necessary to have another formal vote during the second session.

Dr. Guy W. Fisher, Chairman of the Nominations Committee, was recognized and submitted the following nominations:

President-Elect: Dr. Carrington Williams, Richmond
1st Vice-President: Dr. David S. Garner, Roanoke
2nd Vice-President: Dr. Frank E. Tappan, Berryville
3rd Vice-President: Dr. A. Tyree Finch, Farmville
Councilors:
1st District: Dr. A. A. Creecy, Newport News
3rd District: Dr. Guy W. Horsley, Richmond
5th District: Dr. Louis P. Bailey, Nathalie
7th District: Dr. Harold W. Miller, Woodstock
9th District: Dr. James P. King, Radford
Executive Secretary-Treasurer: Robert I. Howard

It was moved and seconded that the nominations be adopted. The motion carried unanimously.

The next order of business was the election of the Speaker of the House of Delegates, and Dr. John T. T. Hundley was reelected.

Nominations were then announced for appointment to the State Board of Medical Examiners from the Fifth Congressional District. They were Dr. S. C. Hall, Danville; Dr. W. N. Thompson, Stuart; and Dr. Walter A. Porter, Hillsville. It was moved and passed that the nominations be approved.

Election of a delegate to the American Medical Association was next considered. This was necessary since the term of Dr. Vincent W. Archer expires December 31. Elected as delegate was Dr. J. Morrison Hutcheson. Dr. Archer was chosen as alternate.

The election of Dr. Hutcheson as delegate made it necessary to elect an alternate for Dr. Carrington Williams, since Dr. Hutcheson had held that office. Dr. Kinloch Nelson was elected.

The Speaker called for nominations of the General Practitioner of the Year. Dr. Rufus Brittain, representing the Virginia Academy of General Practice, placed in nomination the names of Dr. Thomas K. McKee, Saltville, and Dr. Brewster Arthur Hopkins, Stuart. There were no further nominations. Dr. Hundley read the results of the ballots, and declared Dr. Thomas K. McKee to be General Practitioner of the Year in Virginia.

It was then noted that for the first time in many years, Miss Agnes Edwards, Managing Editor of the Virginia Medical Monthly, was not attending the annual meeting. It was moved and seconded that a telegram be sent Miss Edwards expressing the fact that she was missed. The motion carried unanimously.

A resolution was presented commending the Roanoke Academy of Medicine, the Local Committee on Arrangements, Dr. David S. Garner, and the staff of the Hotel Roanoke for their excellent work in connection with the annual meeting, and expressing the appreciation of the Society. The resolution was adopted by unanimous vote.

Announcement was made of the time and place for the 1954 annual meeting. The meeting will be a joint affair with the District of Columbia Medical Society and will take place at Washington's Hotel Shoreham, from October 31-November 3.

With reference to the 1955 meeting, it was moved that the decision be left to the Executive Committee and Council. The motion carried.

There being no further business, the House of Delegates adjourned.

ROBERT I. HOWARD, *Executive Secretary*

Approved:
JAMES L. HAMNER, M.D., *President*
November 12, 1953

FIFTY YEAR CLUB AWARDS

An especially pleasant feature of the first General Session was the awarding of certificates to the new members of the Fifty Year Club. Certificates carrying Life Membership were given those who graduated fifty years ago. The awards were made Monday evening, October 19, by the President, Dr. J. L. Hamner, to

Dr. Joseph LeCenne DeCormis, Accomac
Dr. Courtney Edmond, Clifton Forge
Dr. William Wallace Gill, Richmond
Dr. William H. Howard, Portsmouth
Dr. Louis Knight Leake, Goochland
Dr. William Cline Moomaw, Bedford
Dr. Lawson Otwood Powell, Roanoke
Dr. Marvin Pierce Rucker, Richmond
Dr. John Bonney Shipp, Norfolk
Dr. Benjamin Clinton Shuler, Shenandoah
Dr. Homer Amos Spitler, Middleburg
Dr. Harry Benjamin Stone, Roanoke
Dr. William Joshua Sturgis, Nassawadox
Dr. Charles Walter Thomas, Floyd
Dr. Edward Victor Valz, Philadelphia, Pa.
Dr. Cary Elphus Via, Norfolk
Dr. A. McGarvey Wallace, Gate City
Dr. Elbert Patton Whited, Honaker

COMMITTEES

The following Committees have been named to be in charge of the various activities of the Society during

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the year 1953-1954. Numbers after names in STANDING COMMITTEES indicate number of years to serve, these having been appointed for a definite term in accordance with the By-Laws.

Standing Committees

PUBLICATION: *M. Pierce Rucker, M.D., (1), *Chairman,* Richmond, Lewis H. Bosher, Jr., M.D., (1), Richmond, Wyndham B. Blanton, M.D., (2), Richmond, Lloyd B. Burk, Jr., M.D., (3), Arlington.

POSTGRADUATE MEDICAL EDUCATION: James L. Hamner, M.D., *Chairman,* Mannboro, John T. T. Hundley, M.D., Lynchburg, Mack I. Shanholtz, M.D., Richmond, Kinloch Nelson, M.D., Richmond, William Parson, M.D., Charlottesville, C. V. Cimmino, M.D., Fredericksburg.

ETHICS: Malcolm H. Harris, M.D., (1), *Chairman,* West Point, H. S. Daniel, M.D., (2) Louisa, H. H. Hurt, M.D., (3), Lynchburg.

GRIEVANCE: W. C. Caudill, M.D., (2), *Chairman,* Pearisburg, C. L. Harrell, M.D., (3), Norfolk, John T. T. Hundley, M.D., (4), Lynchburg, James L. Hamner, M.D., (5), Mannboro, Guy R. Fisher, M.D., (1), Staunton.

JUDICIAL: J. Morrison Hutcheson, M.D., (3), *Chairman,* Richmond, Richard P. Bell, Jr., M.D., (1), Staunton, J. D. Zylman, M.D., (2), Falls Church.

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SCIENTIFIC EXHIBITS AND CLINICS: Hunter B. Frischkorn, Jr., M.D., (1), *Chairman,* Richmond, Allen Barker, M.D., (2), Roanoke, Alvin C. Wyman, M.D., (3), Alexandria.

PROGRAM: Benjamin W. Rawles, Jr., M.D., (1), *Chairman,* Richmond, Ira L. Hancock, Jr., M.D., (2), Creeds, A. A. Creecy, M.D., (3), Newport News.

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*Since deceased.

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Fletcher J. Wright, Jr., M.D., Petersburg; Charles L. Savage, M.D., Waynesboro.

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HOUSE: Harry J. Warthen, Jr., M.D., *Chairman,* Richmond; Donald S. Daniel, M.D., Richmond; Fletcher J. Wright, Jr., M.D., Petersburg.

POLIO: Lee E. Sutton, Jr., *Chairman,* Richmond; R. B. Bowles, M.D., Mathews; E. A. Harper, M.D., Lynchburg; Robert C. Hood, M.D., Arlington; Roy M. Hoover, M.D., Roanoke; McLemore Birdsong, M.D., Charlottesville.

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TO ASSIST AMERICAN DIABETES ASSOCIATION: William R. Jordan, M.D., *Chairman,* Richmond; Robert C. Crawford, M.D., Roanoke; W. Callier Salley, M.D., Norfolk; James G. Willis, M.D., Fredericksburg.

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AMERICAN MEDICAL EDUCATION FOUNDATION: Marcellus A. Johnson, Jr., M.D., *Chairman,* Lewis Gale Hospital, Roanoke; Harry C. Bates, Jr., M.D., Arlington; L. H. Bracey, M.D., South Hill; Malcolm H. Harris, M.D., West Point; F. D. Maphis, M.D., Strasburg; John R. Mapp, M.D., Nassawadox; Walter McMann, M.D., Danville; Richard C. Potter, M.D., Marion; T. S. Edwards, M.D., Charlottesville; James L. Chitwood, M.D., Pulaski; Lyddane Miller, M.D., Amherst; John H. Dellinger, M.D., Norton; Carrington Williams, M.D., Richmond.

EXECUTIVE COMMITTEE OF COUNCIL: Guy W. Horsley, M.D., *Chairman,* Richmond; Walter P. Adams, M.D., Norfolk; James L. Hamner, M.D., Mannboro.

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FEDERAL MEDICAL SERVICES: Charles M. Caravati, M.D., *Chairman,* Richmond; John O. Boyd, Jr., M.D., Roanoke; W. L. Nalls, M.D., Alexandria; E. C. Drash, M.D., Charlottesville.

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IN MEMORIAM

MEMBERS OF THE MEDICAL SOCIETY OF VIRGINIA WHOSE DEATHS HAVE BEEN REPORTED SINCE 1952 MEETING

Dr. Lee Scott Barksdale, Hopewell
Dr. Forrest McLean Bennett, Richmond
Dr. James Gordon Boisseau, Richmond
Dr. John Otto Boyd, Roanoke
Dr. Alexander Gustavus Brown, Jr., Richmond
Dr. John Bunyan Bullard, Richmond
Dr. Birnie Roscoe Caldwell, Craig Healing Springs
Dr. Robert Dennis Caldwell, Lynchburg
Dr. Franklin Harry Cohen, Norfolk
Dr. Claude C. Coleman, Richmond
Dr. Robert Page Cooke, Lexington
Dr. Robert Lawrence Corbell, Portsmouth
Dr. John Gibson Davis, Roanoke
Dr. A. Henry Dunn, Riverside, California
Dr. St. George Tucker Grinnan, Richmond
Dr. Walter Paul Hammer, Falls Church
Dr. William Cloud Harman, Dolphin
Dr. Alvah Livingston Herring, Richmond
Dr. Gilmer Gustave Holland, Holland
Dr. Robert W. Holley, Appalachia
Dr. Leonidas Leroy Jones, Portsmouth
Dr. Linwood Dickens Keyser, Roanoke
Dr. Harry Buyer LaFavre, Virginia Beach
Dr. Edgar L. Lawrence, Roanoke
Dr. S. Eugene Massey, New Smyrna Beach, Florida
Dr. Richard Mason, The Plains

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Dr. George Madison Maxwell, Roanoke
Dr. Benjamin Crumpacker Moomaw, Roanoke
Dr. George Thomas Myers, Norfolk
Dr. John Edward Payne, Arlington
Dr. William Alfred Pinkerton, North Garden
Dr. Oscar Lee Ramsey, Gretna
Dr. Paul Rawiszer, Hixson, Tennessee
Dr. James Washington Reed, Norfolk
Dr. William W. Robertson, Danville
Dr. Richard Ovid Rogers, Bluefield, West Virginia
Dr. Lawrence Thomas Royster, University
Dr. Albert George Schnurman, Roanoke
Dr. James Henderson Smith, Richmond
Dr. Percy Bethel Stokes, Norfolk
Dr. Robert Washington Sturgis, Norfolk
Dr. Elbert Berkley Talbot, Richmond
Dr. Achilles Lyons Tynes, Staunton
Dr. Stephen Hurt Watts, Charlottesville
Dr. Reid White, Jr., Lexington
Dr. Hudson Mason Wingfield, Richmond
Dr. Richard Henry Woolling, Pulaski
Dr. Burbridge Scott Yancey, Harrisonburg
Dr. Oscar Raymond Yates, Suffolk

AUDITOR'S REPORT

October 1, 1952—September 30, 1953

OFFICERS AND COUNCILORS
THE MEDICAL SOCIETY OF VIRGINIA
RICHMOND, VIRGINIA
GENTLEMEN:

We have made an examination of the books and records of THE MEDICAL SOCIETY OF VIRGINIA, Richmond, Virginia, for the fiscal year ended September 30, 1953, and have prepared therefrom the Balance Sheet, Exhibit "A" and Statement of Income and Expenses, Exhibit "B". With the exceptions noted in the immediately following paragraph, our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

We did not verify the accounts receivable by direct confirmation with the debtors, nor did we verify the accounts payable.

Subject to the exceptions stated in the preceding paragraph, it is our opinion that the accompanying Balance Sheet, Exhibit "A", and Statement of Income and Expenses, Exhibit "B", prepared on the cash receipts and disbursements basis, present fairly the financial condition of the Society at September 30, 1953, and the results of its operations for the year then ended in conformity with generally accepted principles of accounting, applied on a basis consistent with that of the preceding year.

Yours very truly,
MITCHELL, WIGGINS & SMITH
By R. E. WIGGINS
Certified Public Accountant

Financial Condition

The financial condition of the Society at September 30, 1953, is shown in the Balance Sheet, Exhibit "A", on the accrual basis. A summary thereof is presented below in comparison with the financial condition for the two preceding years:

ASSETS

	9-30-53	9-30-52	9-30-51
Cash	$ 56,083.79	$ 47,717.14	$ 40,901.62
Accounts receivable	2,264.12	2,322.48	2,505.47
Investments—United States Bonds	34,351.50	33,341.00	32,373.00
Fixed assets	43,061.10	43,061.10	43,061.10
TOTAL—ALL FUNDS	$135,760.51	$126,441.72	$118,841.19

LIABILITIES, SURPLUS AND FUND BALANCE

Liabilities:			
Accounts payable	$ 1,443.20	$ 1,216.06	$ 1,686.95
Surplus:			
General Fund	91,256.21	82,164.56	74,093.14
Fund Balance:			
Plant Fund	43,061.10	43,061.10	43,061.10
TOTAL—ALL FUNDS	$135,760.51	$126,441.72	$118,841.19

Analyses and explanation of the more important balance sheet items follow:

CASH—$56,083.79

All recorded cash receipts were accounted for by deposits in the banks, and disbursements were supported by properly signed and endorsed paid checks. Balances on deposit at September 30, 1953 were confirmed by direct correspondence with the banks as follows:

First and Merchants National Bank—Checking account	$ 40,769.51
First and Merchants National Bank—Savings account	6,781.44
The Bank of Virginia—Savings account	11.84
The Bank of Virginia—Certificate of deposit	7,500.00
Southern Bank and Trust Company—Savings account	1,021.00
TOTAL	$ 56,083.79

INVESTMENTS—$34,351.50

Investments, consisting of United States Savings Bonds, were verified by inspection of the securities held in the safe deposit box at First and Merchants National Bank, Richmond, Virginia. They are shown in the Balance Sheet at their current redemption value. Details of investments are shown in Schedule 1.

FIXED ASSETS—$43,061.10

Details of the fixed assets carried in the Plant Fund are shown in Schedule 2. No indebtedness against these assets was disclosed by the records.

Operations

The income and expenses for the fiscal year ended September 30, 1953 are shown in Exhibit "B", prepared on the cash receipts and disbursements basis. A summary of income and expenses in comparison with that of the two preceding years is presented as follows:

	Fiscal Year Ended		
	9-30-53	9-30-52	9-30-51
INCOME			
Membership dues	$45,754.91	$43,470.10	$43,701.78
Medical monthly publication	17,835.74	18,122.56	17,678.97
Commercial exhibits and convention	-	2,030.61	4,568.54
Other income	708.98	662.79	816.94
TOTAL	$64,299.63	$64,286.06	$66,766.23
EXPENSES			
Executive office	$53,573.12	$56,348.70	$87,527.82
Public relations department	2,351.06	1,130.64	823.24
TOTAL	$55,924.18	$57,479.34	$88,351.06
INCOME OVER (UNDER) EXPENSES	$ 8,375.45	$ 6,806.72	($21,584.83)

Included in expenditures of the executive office for the fiscal year ended September 30, 1951 is the purchase of office building and equipment totaling $35,367.00. For the years 1953 and 1952, there were no charges for capital expenditures.

In General

The bookkeeping records were found to have been kept in a satisfactory manner.

Insurance in force at September 30, 1953 determined from policies on file was as listed below:

FIRE	
Office furniture and fixtures	$ 6,000.00
Building—1105 West Franklin Street, Richmond, Virginia	26,000.00
Walter Reed House, Belroi, Virginia	2,000.00
LIABILITY—OWNER'S, LANDLORD'S, AND TENANT'S	
Bodily injury	$25,000.00 - $50,000.00
Property damage	5,000.00
FIDELITY BONDS	
Executive Secretary-Treasurer	5,000.00
Secretary	5,000.00

Balance Sheet—September 30, 1953
Exhibit "A"
General Fund

ASSETS

CURRENT ASSETS		
Cash in bank		$56,083.79
Accounts receivable:		
Due from members—Estimated collectible value—1953 Dues—50 @ $25.00	$1,250.00	
Advertising—Virginia Medical Monthly	1,014.12	2,264.12
TOTAL CURRENT ASSETS		$58,347.91
INVESTMENTS		
United States Savings Bonds—Present value (Schedule 1)		34,351.50
		$92,699.41

LIABILITIES AND SURPLUS

CURRENT LIABILITIES	
Accounts payable:	
Preparation of Medical Journal—September 1953	$ 1,443.20
Surplus:	
Unrestricted—Available for appropriation	91,256.21
	$92,699.41

PLANT FUND

LAND AND BUILDING—At cost (Schedule 2)		$35,061.10
OFFICE FURNITURE AND EQUIPMENT (Schedule 2)		
At cost	$ 951.65	
Estimated insurable value	7,048.35	8,000.00
		$43,061.10
FUND BALANCE		$43,061.10
		$43,061.10

Statement of Income and Expenses
For the Fiscal Year Ended September 30, 1953
Exhibit "B"

	Actual		Budget
GROSS INCOME			
Membership dues		$45,754.91	
History of Medicine in Virginia		158.92	
Interest on savings accounts		175.61	
American Medical Association		374.45	
Virginia Medical Monthly:			
Advertising	$17,493.37		
Subscriptions—Non-Members	342.37	17,835.74	
TOTAL GROSS INCOME		$64,299.63	
EXPENSES			
Executive office:			
Salaries		$19,820.78	$24,500.00
Telephone and telegrams		1,208.69	1,500.00
Postage		392.75	1,000.00

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Stationery and office supplies	558.18	900.00
Office equipment—Repairs and replacements	687.48	750.00
Building maintenance and repairs—Net	2,096.71	3,000.00
Convention expenses	2,170.17	500.00
Council expenses	57.85	425.00
Delegates and executive assistant to A.M.A.	1,219.44	2,200.00
President's expense	538.98	1,000.00
Traveling expense	1,376.64	2,000.00
Preparation and distribution of Medical Journal	16,079.37	18,000.00
Scientific exhibits	2,047.47	2,000.00
Post-Graduate Medical Education Committee	601.60	1,000.00
Legislative Committee	600.00	600.00
Walter Reed Commission	142.95	250.00
Cancer Control	299.25	400.00
Nat. Emergency Medical Service		150.00
Miscellaneous health service committees	233.63	450.00
Woman's auxiliary	5.00	100.00
Membership dues — Affiliated agencies	85.00	85.00
President's contingent fund		500.00
Special appropriations:		
Virginia Council Health and Medical Care	2,000.00	2,000.00
National Society Medical Research	150.00	150.00
Medical service brochure	346.50	400.00
Framing pictures of past presidents	236.00	200.00
Miscellaneous	372.88	500.00
Social security taxes	245.80	375.00
TOTAL EXECUTIVE OFFICE	$53,573.12	$64,935.00
Public Relations Department:		
Conference expenses	$ 445.77	$ 750.00
Radio and press	285.24	400.00
Literature and bulletins	1,235.04	1,000.00
Exhibits	385.01	205.00
TOTAL—PUBLIC RELATIONS DEPARTMENT	$ 2,351.06	$ 2,355.00
TOTAL EXPENSES	$55,924.18	$67,290.00
EXCESS OF INCOME OVER EXPENSES	$ 8,375.45	

Fixed Assets
September 30, 1953
Plant Fund

LAND AND BUILDINGS—At cost		
Walter Reed House, Belroi, Virginia		$ 1,000.00
Office building—1105 West Franklin Street, Richmond, Virginia		34,061.10
TOTAL LAND AND BUILDINGS		$35,061.10
OFFICE FURNITURE AND EQUIPMENT		
Estimated insurable value at October 1, 1950		$ 7,048.35
Purchased during year ended September 30, 1951:		
Adding machine	$100.00	
Addressograph—Multigraph stand	127.50	
Protectograph—Check writer	110.30	
Typewriter	156.20	
File cabinets (2)	71.50	
Vacuum cleaner	69.95	
Desks and chairs (2)	316.20	951.65
TOTAL OFFICE FURNITURE AND EQUIPMENT		$ 8,000.00
TOTAL FIXED ASSETS		$43,061.10

Investment Bonds
September 30, 1953
Schedule 1

TYPE OF BONDS	SERIES	NO. BONDS	DATED	DUE	VALUE AT MATURITY	COST	VALUE AT 9-30-52	VALUE AT 9-30-53
U. S. Savings	F	10	2-1-43	2-1-55	$ 5,000.00	$ 3,700.00	$ 4,570.00	$ 4,725.00
U. S. Savings	F	17	12-1-43	12-1-55	8,500.00	6,290.00	7,539.50	7,769.00
U. S. Savings	F	1	1-1-44	1-1-56	500.00	370.00	443.50	457.00
U. S. Savings	F	3	2-1-44	2-1-56	1,500.00	1,110.00	1,330.50	1,371.00
U. S. Savings	F	2	6-1-44	6-1-56	1,000.00	740.00	874.00	900.00
U. S. Savings	F	2	12-1-44	12-1-56	1,000.00	740.00	861.00	887.00
U. S. Savings	F	2	5-1-45	5-1-57	1,000.00	740.00	848.00	874.00
U. S. Savings	F	7	11-1-45	11-1-57	7,000.00	5,180.00	5,845.00	6,027.00
U. S. Savings	F	1	3-1-46	3-1-58	500.00	370.00	417.50	430.50
U. S. Savings	F	10	3-1-46	3-1-58	10,000.00	7,400.00	8,350.00	8,610.00
U. S. Savings	F	6	10-1-49	10-1-61	3,000.00	2,220.00	2,262.00	2,301.00
TOTALS					$39,000.00	$28,860.00	$33,341.00	$34,351.50

EDITORIAL

Joseph Goldberger (1874-1929) and Pellagra

THE STORY OF THE FIRST EPIDEMIOLOGIC STUDY OF A METABOLIC DISEASE

IN THE early part of the present century a new disease appeared in the Southern States. The date is fixed roughly by the depression of 1907. It had been described and named in Italy. Well do I remember my first case of pellagra—a Negro woman with gastrointestinal symptoms, characteristic symmetrical skin eruption, and a very severe vulvitis. She was seen by many consultants and a diagnosis was made of an unusual form of syphilis. The vulvitis was so horrible that the superintendent of nurses begged me to have the patient sent home before she had a nurses' strike. Several years later when the disease had become generally recognized, I took some members of the American Public Health Association on a post-convention trip to see a number of cases in the Central State Hospital for the Insane in Petersburg, Virginia.

Such was my introduction to this new and dreadful malady. Is there any wonder, then, that I should be fascinated by the story of its conquest which, as told by Robert P. Parsons, advances step by step like a good detective story under the guidance of one who had the genius to see the significant signs in logical sequence?

JOSEPH GOLDBERGER, M. D.
Courtesy of The Armed Forces Medical Library

With the suddenness of a plague, pellagra became a serious problem. In 1909 the Governor of Illinois appointed a commission composed of three outstanding physicians to investigate an outbreak in the State Asylum. They reported that there were 500,000 cases in the State of Illinois. Their conclusion was that pellagra was a disease due to infection with a living micro-organism of unknown nature. In 1912, R. M. Thomp-

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son and J. H. McFadden financed another commission under the auspices of the New York Post-Graduate Medical School to study the ravages of pellagra in Southern textile-mill villages. This commission also came to the conclusion that pellagra was probably a specific infectious disease and such was the general opinion in 1914 when Joseph Goldberger entered the picture.

He started his investigation at the little hospital of the U. S. Public Health Service for pellagra at Spartanburg, S. C., but extended his inspection throughout the South. The State Asylum at Milledgeville, Georgia, and the Methodist Orphan Asylum at Jackson, Mississippi, were centers of intensive study. He assigned D. G. Willets to collect data at Milledgeville and C. H. Waring in Jackson and he, himself, continued his inspection of institutions in both the South and throughout the North.

The first thing that struck Goldberger as peculiar for an infectious disease was that in none of the institutions in which pellagra existed did any of the personnel contract the disease. Moreover, in the orphanage in Jackson the children under six years and those over twelve escaped the disease. The only discoverable difference in the care of these children was the diet. The young children were fed milk, the older ones had almost no milk and the oldest children a much larger supply of meat. The six-to-twelve agers ate the same food that was commonly used wherever pellagra was prevalent—molasses, biscuit, hominy grits, corn mush, gravy, and sow belly. Similar conditions pertained at the nearby Baptist orphanage. The diet was corrected so that each child was fed milk, eggs, and fresh meat. The pellagra disappeared in a few weeks and did not return the following spring. A properly controlled experiment was instituted at the Milledgeville asylum. Those on the augmented diet recovered and had no recurrences.

Goldberger's next step was the reproduction of the disease. Dr. E. H. Galloway, the Secretary of the Mississippi State Board of Health, who was impressed by the results at the orphanages in Jackson, went with Goldberger to see Earl Brewer, the Governor, and together the three found eleven long-term convicts who were willing to submit to a pellagra-genic diet for six months on the promise of a pardon by the Governor. The work was put in charge of Dr. G. A. Wheeler. The diet consisted of biscuits, fried mush and syrup, grits and brown gravy, coffee with sugar for breakfast; corn bread, cabbage, sweet potatoes, grits, syrup for dinner; fried mush, biscuits, rice, gravy, corn syrup, coffee with sugar for supper. A few weeks before the six months elapsed five of the convicts developed the typical eruption of the disease.

Now that he could both cure and produce the disease, Goldberger delegated Edgar Sydenstricker to survey the diet of the poor throughout the South and to figure out what correlation there was between the distribution of pellagra and what was beginning to be known as a pellagra diet.

But the infectious theory would not down. To combat this he devised a number of experiments. He and Wheeler injected blood from pellagrins into each other's muscles. They swabbed out the secretions from the patients' noses and throats and applied these swabs to their own noses and throats. Scales from the sores and the urine and feces were mixed with dough and swallowed. Lest the acid of the normal stomach be accused of protecting the investigators, they took bicarbonate of soda *beforehand*. These experiments were repeated upon Goldberger and upon Sydenstricker, Wheeler, Willets, W. F. Tanner and Mrs. Goldberger in Spartanburg and by McCoy in Washington.

Now came the question of the most feasible way of eradicating the disease. He advised keeping a cow, a garden, and chickens. In his search for a cheaper way out, he consulted the leaders in nutrition and food chemistry, men like E. V. McCollum,

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Alfred Hess, Graham Lusk, Mendel and Osborne at New Haven, and Hunt and Rosenau in Boston. Chittenden and Underhill in 1917 were able to produce black tongue in dogs by feeding them a diet that would produce pellagra in human beings. When Goldberger was convinced that the two diseases were identical he was in a position to make use of animal experimentation. It was also found that rats developed a characteristic skin rash when kept on a similar diet. The investigation was now transferred to the laboratory and progress was more rapid. By 1920 it was determined that the disease was due to the lack of amino acids or of mineral supply in the diet, or some unknown vitamin factor, or some combination of these. By 1922 the pellagra prevention (P-P) factor was narrowed down to amino acid of some kind. The next year it was definitely proved that brewer's yeast contains the P-P factor. Further tests narrowed the search still further, but Goldberger did not live long enough to pinpoint the identity of his P-P. Like Moses, he was taken away when he was in sight of the Promised Land. Years later vitamin P-P was named vitamin G in his honor.

Goldberger was a man of many paradoxes and from whatever angle he is viewed he is extremely interesting. He was born on a tenant farm in Giralt, Hungary (now Czechoslovakia). When he was seven years old, his parents and their eight children immigrated to New York. They grew up on the sidewalks and among the push carts of the eastside. Joseph was always reading a book. Even when delivering groceries for his mother's store he carried a book with him. In due time he began a course in civil engineering in the City College and at the end of his second year he stood fifth in his class of 600. When by chance he heard Austin Flint, Jr. give the Harvey Lecture at the Bellevue Hospital Medical College, he decided on medicine as his life work. He graduated at Bellevue second in his class; as an interne in the hospital he was noted for his history taking. He began practicing at Wilkes Barre, Pennsylvania, but was not happy in private practice and at the beginning of the Spanish War he tried to enter the Navy, but his application was ignored. Instead he entered the Public Health Service and was stationed at Reedy Island in the Delaware River. At his first quarantine station he served under Farrar Richardson who was to play such an important role in his life by introducing him to his future wife. He was also inspired by Henry Carter and he asked Surgeon General Wyman for an assignment in Tampico so that he could study yellow fever.

Goldberger had an uncanny way of choosing the right approach to a problem. To mention all of his early successes would be beyond the scope of this editorial. He was the first to succeed in inoculating a monkey with measles. In 1909 he was called to Philadelphia to study an outbreak of dermatitis among the Navy personnel. For eight years it had pestered the sailors each spring in spite of the local dermatologists. Within forty-eight hours he had not only solved the mystery but he demonstrated the cause, Pediculoides ventricosus.

His courtship and marriage are revealing. Mary Farrar was the daughter of a well known attorney, prominent in New Orleans society, who looked with disapproval on having as a prospective son-in-law a Jew whose parents spoke little English. True to form the lawyer sent out a dragnet for information upon which to base his opposition. The information, however, without exception, was enthusiastically favorable. Goldberger on his part had much trouble in gaining his parents' sanction. The outcome was in accord with the Goldberger tradition—all parties became whole-heartedly cooperative.

NOTE: This editorial was written by Dr. Rucker just before he went to the hospital in his final illness.

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SOCIETIES

Princess Anne County Medical Society.

Dr. Ira L. Hancock, Creeds, president, has appointed the following as chairmen of the various committees of the society for the coming year: Dr. H. W. Swertfeger for Public Relations; Dr. James W. Todd for Grievance and also Program; Dr. Cora Z. Corpening, Ethics; Dr. H. F. Dormire, Membership.

The Mid-Tidewater Medical Society

Met at Tappahannock, October 27, with the president, Dr. Wm. H. Hosfield of West Point, presiding. At the scientific session, papers were read by guests, Dr. Carrington Williams of Richmond on Diverticulitis of the Colon, and by Dr. Samuel W. Budd, Jr., also of Richmond, on Brucellosis and Typhoid Fever. Mr. Robert I. Howard, secretary of The Medical Society of Virginia, gave a report on the meeting recently held in Roanoke.

Dr. H. L. Shinn of Hallieford will succeed to the presidency the first of the coming year and those to serve with him are Dr. Thomas E. Smith, Hayes Store, as president-elect, Dr. M. H. Harris, West Point, as secretary, and Dr. Wm. H. Hosfield as treasurer. The vice-presidents and councilors are: Drs. Joseph W. Chinn, Tappahannock; Dr. Carl Broaddus of King and Queen County; Dr. A. W. Lewis, Jr., Aylett; Dr. J. R. Parker, Providence Forge; Dr. B. H. Bailey, Yorktown; Dr. Raymond Brown, Gloucester; Dr. A. L. Van Name, Urbanna; and Dr. R. B. Bowles, Mathews. The next meeting will be in January 1954 at West Point.

Patrick-Henry Medical Society.

At a meeting on October 2nd, the following officers were elected for the year 1954: President, Dr. W. C. Akers, Stuart; vice-president, Dr. H. M. Price, Martinsville; and Dr. T. H. Dickerson of Martinsville was re-elected secretary-treasurer. At the scientific session, Dr. A. M. Groseclose of Roanoke, invited guest, discussed "Bleeding in the Third Semester".

Warwick-Newport News Medical Society.

At the meeting of this Society on October 13, following a social hour and dinner, Dr. Walter Freeman, professor of Neurology at Georgetown University School of Medicine, Washington, was the guest speaker, his subject was "Recent Aspects of Lobotomy in the Treatment of Psychiatric Diseases".

The November meeting was at the Medical Clinic Building of the Newport News Shipyard on the 10th. A program was given by the Shipyard Clinic, and dealt primarily with the problems of medicine in industry. Refreshments were served after the meeting.

Dr. O. Watts Booth and Dr. W. Ward Anderson, Jr., both of Newport News, are president and secretary, respectively, of this Society.

The Lynchburg Academy of Medicine

Held a dinner meeting on October 12th at the Virginian Hotel. Dr. David G. Welton spoke on "Constructive Criticism of the Medical Profession". Seven doctors were elected to full membership, having met the necessary requirements.

Richmond Academy of Medicine.

At the November 11 meeting of the Academy, Dr. Virgil May read a paper on "Low Back Pain with Sciatica", and Dr. E. W. Perkins spoke on "The Indications and Technique for Intermarginal Eyelid Adhesions". The latter was accompanied with color films.

Roanoke Academy of Medicine.

The first meeting under the presidency of Dr. C. D. Nofsinger was held at the Public Health Center on November 2nd. Dr. Charles Young, Jr., spoke on "Exophthalmus" with the discussion led by Dr. J. Lawson Cabaniss. Dr. Alfred L. Wolfe gave a case report on "Idiopathic Hypertrophy of the Heart". Dr. G. B. Lawson led the discussion on this paper. Dr. Charles B. Bray, Jr., is this year's secretary-treasurer.

The Virginia Peninsula Academy of Medicine

Held its regular meeting on October 28 at the James River Country Club, under the presidency of Dr. C. D. Bradley of Newport News. Following a social hour and dinner, Dr. J. Edwin Wood, Jr., of the University of Virginia gave a most interesting talk on "The Management of Congestive Heart Failure". Dr. W. T. Watkins, Jr., of Newport News, is secretary.

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NEWS

The Medical Society of Virginia

Held a banner meeting in Roanoke, October 18, 19, 20 and 21, under the presidency of Dr. James L. Hamner of Mannboro. The registered attendance was 983, which included 697 physicians, 176 ladies, and 110 exhibitors. Alumni and special society luncheons and dinners added much to the interest of the meeting. The guest speakers were Dr. Robert L. King of Seattle, Wash., who spoke on Rheumatic Fever and Heart Disease; Dr. Charles H. Mauzy of Winston-Salem, N. C., whose subject was Obstetrical Complications—The Management Now and Twenty Years Ago; Dr. Charles S. Wise of Washington, D. C., who took part in the Rehabilitation Symposium; and Dr. Claude Forkner of New York City who spoke on the Treatment of Lymphomas in a symposium on that subject.

At the Monday evening session, Dr. Hamner delivered his presidential address, presented Dr. Thomas H. Hunter, the new Dean of the School of Medicine at the University of Virginia, and our own Dr. Walter B. Martin of Norfolk, president-elect of the American Medical Association. Dr. H. Sherman Oberly, President of Roanoke College, was the closing speaker. At this session, also, certificates were awarded the new members of the Fifty Year Club, and a Memorial was held for members who had died during the tear. (List in minutes.)

The exhibits, technical and scientific, attracted much attention. In the scientific exhibits, prizes were awarded for outstanding work to Drs. E. N. Weaver, Wm. P. Tice, Charles H. Peterson, Allen Barker, Charles D. Smith and John A. Martin of Roanoke, for their exhibit entitled Diagnosis and Treatment of Some Intracranial Lesions; the second award went to Dr. George Cooper, Jr., Dr. McLemore Birdsong and Dr. Randolph Bradshaw of Charlottesville for the exhibit Emergencies in the Newborn; the third award was for the exhibit on Diagnosis and Surgical Implications of Segmental Thrombosis in the Lower Extremities by Drs. Eugene L. Lowenberg, Philip B. Parsons and Joe Lee Frank, Jr., of Norfolk.

Many physicians participated in the golf tournament on Monday afternoon, and the low net of 71 was tied by Dr. John A. Cocke, Norfolk, and Dr. Thomas G. Hardy, Farmville, for first prizes. Several runners-up also received prizes.

A cocktail party, banquet and entertainment were on Tuesday evening, at which time Dr. Vincent W. Archer of Charlottesville was installed as president. In the last meeting of the House of Delegates, Dr. Carrington Williams of Richmond was named president-elect and Dr. J. M. Hutcheson of Richmond was selected as the new delegate to the American Medical Association. The vice-presidents named at this time are Dr. David S. Garner of Roanoke, Dr. Frank E. Tappan of Berryville, and Dr. A. Tyree Finch of Farmville. Robert I. Howard was re-elected secretary-treasurer. The councilors from the odd numbered districts being re-elected there were no changes in this body. As previously decided by the Council, plans have been made for the 1954 meeting to be held in Washington, D. C., as a joint one with the Medical Society of the District of Columbia from October 31-November 3 inclusive.

Special Societies

Held luncheon or dinner meetings at time of the annual meeting of The Medical Society of Virginia in Roanoke, and are reported as follows:

VIRGINIA UROLOGICAL SOCIETY

Officers elected at this luncheon are Dr. T. B. Washington, Richmond, president; Dr. Charles J. Devine, Norfolk; and Dr. Wm. R. Jones, Jr., Richmond, re-elected. The 1954 meeting will be held in conjunction with Washington urologists since the society will be held in Washington, and the program committee for this occasion will be composed of Drs. Washington, A. I. Dodson, Sr., and Dr. Jones.

VIRGINIA SOCIETY OF OBSTETRICIANS AND GYNECOLOGISTS

Dr. Chester L. Riley of Winchester was installed as president, Dr. E. S. Groseclose of Lynchburg was named president-elect, and Dr. Chester D. Bradley of Newport News was re-elected secretary-treasurer. New members admitted are Drs. A. T. Finch, Farmville; Lee Earnhardt, Jr., Fredericksburg; T. H. Haas, Radford; Stanley E. Smith, Jr., Norfolk; and Arthur L. Wilson, Winchester.

VIRGINIA DIABETIC ASSOCIATION

Mr. A. Ross Pond, Field Representative of the American Diabetic Association, was present and gave an interesting talk. The Association voted unanimously to accept the invitation of the Virginia

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Academy of General Practice to participate in their meeting in May 1954 and made plans to stimulate more general interest throughout the State in diabetic detection. Officers elected are President, Dr. Robert L. Bailey, Jr., Richmond; vice-presidents, Dr. Thomas S. Edwards, Charlottesville and Dr. William A. Read, Newport News; and secretary-treasurer, Dr. J. F. Conner, Kecoughtan.

VIRGINIA ORTHOPEDIC SOCIETY

Dr. Bernard Packer of Richmond was elected president of this Society at their luncheon meeting in Roanoke, Dr. Allen Ferry of Arlington vice-president, and Dr. William Deyerle of Richmond was named secretary.

VIRGINIA SURGICAL SOCIETY

There was no business transacted at the meeting of this Society in Roanoke, it being purely social. The annual business and scientific session will be at Hot Springs, Va., on January 16, 1954. Dr. Randolph Hoge of Richmond and Dr. R. L. Payne, Jr., of Norfolk are president and secretary, respectively.

VIRGINIA SECTION, AMERICAN COLLEGE OF PHYSICIANS

Dr. J. Powell Williams of Richmond is chairman of the Section at this time, and Dr. James F. Waddill of Norfolk secretary. The Section will hold its scientific meeting in Richmond on February 25, 1954.

VIRGINIA RADIOLOGICAL SOCIETY

Officers of this Society elected at their luncheon meeting in Roanoke are president, Dr. L. O. Snead of Richmond; vice-president, Dr. Allen Barker of Roanoke; and secretary-treasurer, Dr. P. B. Parsons of Norfolk. The interim Scientific Session of the Society will be in April 1954 in Richmond, the exact date and program to be announced later.

The Southern Medical Association,

With its number of sectional and special society meetings, was largely attended at the convention in Atlanta, Georgia, October 26-29, under the presidency of Dr. Walter C. Jones of Miami, Florida. At this meeting, Dr. Alphonse McMahon of St. Louis succeeded to this office, and Dr. Robert L. Sanders, Memphis, Tenn. was named president-elect to take office in 1954. Dr. W. R. McKenzie, Baltimore, and Dr. Marion Pruitt of Atlanta were elected vice-presidents, and new members of the council are Dr. Olin Cofer of Atlanta, Dr. Milford Rouse of Dallas, Texas, and Dr. J. Morris Reese of Baltimore. The 1954 convention will be in St. Louis.

American College of Surgeons.

At the meeting of the College in Chicago, in October, the following Virginia physicians were admitted to fellowship:

Dr. Henry L. Bastien, Arlington
Dr. R. D. Butterworth, Richmond
Dr. Earnest B. Carpenter, Richmond
Dr. Beverley B. Clary, Richmond
Dr. Custis L. Coleman, Richmond
Dr. William E. Daner, Richmond
Dr. Henry P. Deyerle, Harrisonburg
Dr. John E. George, Roanoke
Dr. William C. Humphries, Woodstock
Dr. John J. Keenoy, Portsmouth
Dr. Peter N. Pastore, Richmond
Dr. George N. Thrift, Richmond
Dr. John A. Vann, Norfolk
Dr. Henry A. Wiseman, III, Danville

The next Clinical Congress of the College will be held November 15-19, 1954, at Atlantic City, New Jersey.

A Sectional meeting will be held in Charlotte, North Carolina, February 1-3, 1954, with headquarters at the Hotel Charlotte. The states participating in this meeting are: Alabama, Delaware, District of Columbia, Florida, Georgia, Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina, Tennessee and Virginia.

The Virginia Medical Service Association,

At a meeting of its board of directors held recently, elected Dr. H. Grant Preston of Harrisonburg its president. Dr. Russell M. Cox, Portsmouth, was elected vice-president; and Dr. Benjamin W. Rawles, Jr., Richmond, secretary-treasurer. Dr. Herbert D. Wolff, Jr., of Alexandria, was named chairman of the board of directors. Dr. Richard J. Ackart of Richmond is executive director of the group.

Dr. Gardner Chairman of Richmond Board of Health.

Dr. Emily Gardner, prominent pediatrician of Richmond, has been elected chairman of the City Board of Health, to succeed Dr. M. Pierce Rucker, who submitted his resignation because of ill health. His term would not have expired until September 1956.

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Dr. H. J. Warthen,

Richmond, attended the meeting of the Surgeons Club at Johns Hopkins University, Baltimore, October 18-21, and gave a paper on Surgical Treatment of the Extremities in Diabetes. He also held a surgical clinic.

American Heart Association.

The 1954 annual meeting of the Association will be held at the Conrad Hilton Hotel in Chicago. The Assembly Panels and the General Assembly will be held on Thursday and Friday, April 1 and 2, and will be followed by a specific scientific program on clinical cardiology on Saturday and Sunday, April 3 and 4, conducted under the auspices of the newly formed Section on Clinical Cardiology of the Scientific Council. These sessions will immediately precede the annual meeting of the American College of Physicians.

Dr. A. S. Hurt, Jr.,

Formerly of Richmond, announces that he is now living at Maidens in Goochland County. His former office space at 1004 West Franklin Street, Richmond, is unoccupied and available for sub-leasing.

Seminar in Ophthalmology and Otolaryngology.

The eighth annual University of Florida Midwinter Seminar in Ophthalmology and Otolaryngology will be held at the Sans Souci Hotel in Miami Beach the week of January 18, 1954. The lectures on Ophthalmology will be presented on January 18, 19 and 20, and those on Otolaryngology on January 21, 22 and 23. A midweek feature will be the Midwinter Convention of the Florida Society of Ophthalmology and Otolaryngology on Wednesday afternoon, January 20, to which all registrants are invited. The registrants and their wives may also attend the informal banquet at 8 p.m. on Wednesday. The Seminar schedule permits ample time for recreation.

The Seminar lecturers on Ophthalmology this year are Dr. W. B. Anderson, Durham, N. C.; Dr. W. P. Beetham, Boston; Dr. W. C. Owens, Baltimore; Dr. A. B. Reese and Dr. M. C. Wheeler, both of New York City. Those lecturing on Otolaryngology are Dr. E. N. Broyles, Baltimore; Dr. H. P. House, Los Angeles; Dr. W. J. McNally, Montreal, Canada; Dr. Dorothy Wolff and Dr. D. Woodman, New York City.

Tumor Clinic Approved.

Dr. George Cooper, Jr., chairman of the Cancer Committee of The Medical Society of Virginia, announces that a new Tumor Clinic at Norton was approved in October. It is known as the Norton Diagnostic Tumor Clinic and the Director is Dr. C. H. Henderson.

Dr. John M. Ratliff,

Formerly of Norfolk, has completed his training in radiology and has joined Dr. Q. J. Legg of Newport News in the practice of radiology.

On Staff of John Randolph Hospital.

Dr. Clyde Dougherty has been elected chief of the staff of the newly organized hospital and Dr. W. T. Youngblood will serve as secretary.

The American Foundation for Allergic Diseases

Has been organized in New York State by the American Academy of Allergy and the American College of Allergists. Dr. Horace S. Baldwin of New York was named president of the Foundation and Dr. J. Warrick Thomas of Richmond, Va., was named vice-president. Dr. Thomas is allergist at Johnston-Willis and Retreat for the Sick Hospitals and is assistant professor of allergy at the Medical College of Virginia. Dr. Oscar Swineford, Jr., at the University of Virginia, is one of the trustees of the Foundation.

Dr. James Nicholas Dudley,

Formerly Health Commissioner of Roanoke, Virginia, resigned recently to accept a position with the Lovelace Clinic in Albuquerque, New Mexico.

American Academy of General Practice.

The sixth annual Scientific Assembly of the Academy will be held March 22-25, 1954 in Public Auditorium, Cleveland, Ohio. The entire program will be presented by leaders in the fields to be covered and will be of special interest to family doctors.

The Committee on Scientific Assembly, headed by Dr. John Mosher of Coeymans, N. Y., promises that these four days will unquestionably be the most pleasant, as well as the most instructive, doctors have ever spent at a medical meeting.

The program shows symposia on peptic ulcer, tuberculosis, headache and dizziness, and antibiotics, a live clinic on rehabilitation procedures, presentations on the commonly missed diagnoses of skin

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diseases, the almost forgotten woman—the routine multipara, and unnecessary gynecologic surgery. Arthritis, anemia, surgical problems and recent advances in therapeutics will also be covered. There will also be over 60 scientific exhibits.

A full social program is being planned for the wives culminating with a President's Reception, the first the Academy has had, for the entire attendance.

Dr. Rudolph C. Thomason,

Richmond, has been elected president of the Hermitage Country Club of this city.

Dr. E. C. Stuart, Sr.,

Of Winchester, observed his eighty-eighth birthday anniversary the first of November. He has been practicing for sixty-six years.

Wanted

Physician for the Staff of the DeJarnette State Sanatorium, Staunton, Virginia. This is a psychiatric hospital of approximately 180-bed capacity. Starting salary $8,400.00 to $8,784.00. Apply to the Superintendent. (*Adv.*)

Office Space Available.

Excellent opportunity for physician in expanding community of Alexandria, Virginia, just outside of Washington. Complete 5-room house available for use as office in area needing services of a physician. Owners willing to assist Doctor to get started. Telephone Mr. Charles Gerstein for appointment—TE-6-9378—or write him at 13 East Myrtle Avenue, Alexandria, Virginia. (*Adv.*)

For Sale

Office and practice in Richmond, Virginia. Leaving a well established general practice for specialized training and would like to sell equipment and outstanding accounts. Address "Practice", care the Virginia Medical Monthly, Box 5085, Richmond 20. (*Adv.*)

OBITUARIES

Dr. Marvin Pierce Rucker,

Richmond, Editor of the VIRGINIA MEDICAL MONTHLY for the past eleven years, died October 23rd after a lingering illness. In spite of failing health, he had continued his work on the MONTHLY to the time of his final illness.

Dr. Rucker, a native of Fairfax, was the son of the late Dr. Edwin Timothy Rucker and Annie Pierce Pendleton Rucker and was seventy-two years of age. After studying at the Medical College of Virginia and Harvard University, he received his medical degree from Johns Hopkins University in 1903. After postgraduate study at the University of Leipzig, Germany, he became a general practitioner in Richmond in partnership with his father. He limited his practice to obstetrics and gynecology in 1915 and received international recognition in these fields.

For twenty-seven years, Dr. Rucker taught at the Medical College of Virginia. He was also a special lecturer on the history of obstetrics at Duke University. He conducted extensive research and study relating to his specialties and wrote for medical publications in this and foreign countries. He had also written numerous articles on historical subjects.

Dr. Rucker was identified with many medical organizations and in most of them he held the highest office. He was a past president of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons. He served as president of the Richmond Academy of Medicine and The Medical Society of Virginia. Locally he became a member of the Richmond Board of Health in 1946 and had served as its chairman from 1950 until his resignation a couple of months ago. He was a former chairman of the Board of Stewards of his Church, a director of the central YMCA, a trustee of Randolph Macon College at Ashland, a director of Johnston-Willis Hospital, and had been awarded a Doctor of Laws degree from Randolph Macon College in recognition of his achievements in the medical profession. He was a member of Phi Beta Kappa and Phi Beta Kappa Associates.

His wife, Josephine McRae Rucker, two sons, Drs. Edwin and Douglas Rucker, a daughter, Mrs. Lewis Powell, Jr., and several grandchildren, survive him.

"To live in lives we leave behind is not to die."

Dr. Robert Sheffey Preston,

Well known Richmond physician, died unexpectedly at his home on October 28. He was at his office the previous day and apparently in good health. Death followed a heart attack in the early morning. He was a native of Abingdon and sixty-eight years of age. His medical education was received at Johns Hopkins University, Baltimore, from which he graduated in 1908, later interning in New York and taking post-graduate work in Germany. He then located in Richmond where he had since practiced except for time he served in World War I. He was

for some time on the faculty of the Medical College of Virginia and at time of his death was on staff of Johnston-Willis Hospital. He was identified with a number of medical societies, having been in The Medical Society of Virginia since 1908, and was also active in church and social life. His wife, and three children survive him.

Dr. Charles R. Anderson,

Mayor of Winchester from 1932 to 1946, died at his home there on October 24, after a long illness. He was seventy-six years of age and a graduate of the University of Maryland in 1898. He served in the Army Medical Corps during World War I. For forty-four years he practiced medicine in Winchester and Frederick County and for twenty-five years was a member of the Common Council and interested in political conditions in that section. He had been a member of The Medical Society of Virginia for many years and became a Life member in 1948.

Dr. Ashley P. Cutchin

Who, until he became ill a month ago, was the oldest practicing physician in Southampton County, died at his home in Franklin on November 7. He was seventy-nine years of age and a graduate of the Medical College of Virginia in 1897. Shortly thereafter he located in Franklin where he had since made his home. He joined The Medical Society of Virginia in 1910 and was made a Life member in 1948 in recognition of fifty years of service in the practice of medicine. His wife and three children survive him.

Dr. Oliver F. Blankingship,

Retired physician formerly of Richmond, died in Gordonsville, October 18. He was eighty-eight years of age and had graduated in medicine from the Medical College of Virginia in 1891. He had been a member of The Medical Society of Virginia for fifty-four years. His wife died some years ago, and he is survived by two nieces and two nephews.

Dr. Alexander Y. P. Garnett,

For more than forty years prominent obstetrician in Washington, D. C., died November 4, at the age of 72. He graduated in medicine from the University of Virginia in 1906 and had been a member of The Medical Society of Virginia since 1913. He was considered one of the first specialists in his field in Washington and was a member of numerous medical organizations. He is survived by his wife, two sons and two sisters.

Dr. James Henderson Smith.

The medical profession in Virginia and those of us in The Richmond Academy of Medicine learned with sorrow of the death of Dr. James Henderson Smith on the night of June 4th, 1953.

Dr. Smith was born in Leesburg, Virginia, on September 18th, 1882. He later moved to Lexington and Fredericksburg, Va. His early education was acquired in the local schools and at The Fredericksburg College. He then came to The University College of Medicine, graduating in the class of 1910. He obtained his post graduate training at St. Luke's Hospital in Richmond, and was closely associated with that institution the rest of his life. At the time of his death he was the senior member of its staff.

During the first World War Dr. Smith served as Captain in the Medical Service of Base Hospital No. 45. He was a former president of the Academy and was active in the work of The Medical Society of Virginia, the American Clinical and Climatological Association, and other organizations. He was a member of the Dean's Committee, and was Professor of Clinical Medicine at the Medical College of Virginia.

He was interested in the influence of climate and solar rays on metabolism and did considerable research in relating this to the incidence of pellagra, goitre and other conditions. At the time of his death he was working in this connection with poliomyelitis. In November 1931 The Archives of Internal Medicine was published in two volumes, the second devoted entirely to one of Dr. Smith's papers on solar radiation and pellagra.

His health had not been good during the past few years but he was in his office each day and seemed as well as usual on the morning of June 4th. About noon he developed symptoms of coronary thrombosis and he died that night.

Dr. Smith was always a student of medicine. He had an inquiring mind and this, coupled with his experience from a large practice, and his ability to see a situation clearly, made him one of the outstanding consultants in this section. We shall miss him greatly but he will continue to live in the hearts of his friends and his patients, to whom he will be irreplaceable.

To his family we wish to express our sincere sympathy in their great loss.

WEBSTER P. BARNES
JOHN P. LYNCH
HUNTER H. MCGUIRE

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